FCC RF TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

7inch tablet-Cubby

ISSUED TO
E-matic

3435 Ocean Park Blvd #107 PMB # 444 Santa Monica CA 90405

Report No.:	BL-SZ1470002-601
EUT Type:	7inch tablet-Cubby
Model Name:	CUBBY, SPROUT CHANNEL CUBBY
Brand Name:	Ematic
Test Standard:	47 CFR Part 15 Subpart C
FCC ID:	XHWCUBBY
Test conclusion:	PASS
Test Date:	2014.07.04 – 2014.07.17
Date of Issue:	2014.09.09

Prepared by: Mo Huina (Reporting Specialist)
Date 2014.09.09

Approved by: Wei Yanqun (Chief Engineer)
Date 2014.9.9

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Revision History

Version	Issue Date	Revisions
Rev. 01	2014.09.02	Initial Issue
Rev. 02	2014.09.09	The Second Issue

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6683 3402
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625. The laboratory has met the requirements of the IAS Accreditation Criteria for Testing Laboratories (AC89), has demonstrated compliance with ISO/IEC Standard 17025:2005. The accreditation certificate number is TL-588. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Test Environment Condition

Ambient Temperature	15 to 35℃
Ambient Relative Humidity	30 to 60%
Ambient Pressure	86 to106 kPa

1.4 Announce

(1) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(2) The test report is invalid if there is any evidence and/or falsification.

(3) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(4) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.

(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	E-matic
Address	3435 Ocean Park Blvd #107 PMB # 444 Santa Monica CA 90405

2.2 Manufacturer

Manufacturer	Shaghal Ltd
Address	2231 Colby Ave. L.A., C.A., 90064 U.S.A.

2.3 General Description for Equipment under Test (EUT)

EUT Type	7inch tablet-Cubby
Model under test	CUBBY
Series Model Name	CUBBY, SPROUT CHANNEL CUBBY
Description of Model name differentiation	The equipment model CUBBY and SPROUT CHANNEL CUBBY are 7inch tablet-Cubby, the electrical parameters and internal structure of circuit are same, only the model name is different.
Hardware Version	N/A
Software Version	N/A
Network and Wireless connectivity	Bluetooth, WIFI 802.11b, 802.11g and 802.11n (HT20/40)
About the Product	The EUT is the 7inch tablet-Cubby, it contains Bluetooth and WIFI Modules operating at 2.4GHz ISM band. Only the Bluetooth was tested in this report.

2.4 Technical Information

TX/ RX Operating Range	2400~2483.5MHz band f_c = 2402 MHz + N*1 MHz, where - f_c = “Operating Frequency” in MHz, - N = “Channel Number” with the range from 0 to 78.	
Modulation Type	Carrier	Frequency Hopping Spread Spectrum
	Digital	GFSK, π/4-DQPSK, 8DPSK
Antenna Type	PIFA Antenna	
Antenna Gain	0 dBi	

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No	N/A
	Serial No	N/A
	Capacitance	3800mAh
	Rated Voltage	3.7V
	Extreme Voltage	Low: 3.5V / High:4.2V
Ancillary Equipment 2	AC Power Adapter	
	Brand Name	N/A
	Model No	STC-B0502000-Z
	Serial No	(n.a. marked #1 by test site)
	Rated Input	~ 100-240V, 0.3A, 50/60Hz
	Rated Output	⎓ 5V, 2000mA
Ancillary Equipment 3	Stereo Headset	
Ancillary Equipment 4	USB Data Cable	

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C (12-30-13 Edition)	Intentional Radiators
3	ANSI C63.4-2009	American National Standard for Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
4	ANSI C63.10-2009	American National Standard for Testing Unlicensed Wireless Devices

3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass Note1
2	20dB Bandwidth	15.215(c)	ANNEX A.1	Pass
3	Conducted Emission	15.207	ANNEX A.2	Pass
4	Radiated Spurious Emission	15.249(a)	ANNEX A.3	Pass
5	Band Edge	15.249(a)	ANNEX A.4	Pass
Note 1: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.				

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity (%)	30 -60	
Atmospheric Pressure (kPa)	86-106	
Temperature	NT (Normal Temperature)	+20℃ to +25℃
	LT (Low Temperature)	-20℃
	HT (High Temperature)	+55℃
Working Voltage of the EUT	NV (Normal Voltage)	3.7V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	AGILENT	E4440A	MY45304434	2014.07.07	2015.07.06
Spectrum Analyzer	ROHDE&SCHWARZ	FSL3	103640/003	2014.07.07	2015.07.06
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2014.07.07	2015.07.06
Power Splitter	KMW	DCPD-LDC	1305003215	2014.07.07	2015.07.06
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	--	--
Attenuator (20dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6dB)	KMW	ZA-S1-61	1305003189	2014.07.07	2015.07.06
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2014.07.07	2015.07.06
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2013.07.02	2015.07.01
Test Antenna-Loop(9kHz-30MHz)	SCHWARZBECK	FMZB 1519	1519-037	2013.07.03	2015.07.02
Test Antenna-Bi-Log(30MHz-3GHz)	SCHWARZBECK	VULB 9163	9163-624	2013.07.02	2015.07.01
Test Antenna-Horn(1-18GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2013.07.02	2015.07.01
Test Antenna-Horn(15-26.5GHz)	SCHWARZBECK	BBHA 9170	9170-305	2013.10.07	2015.10.06
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2014.07.07	2015.07.06

4.3 Test Configurations

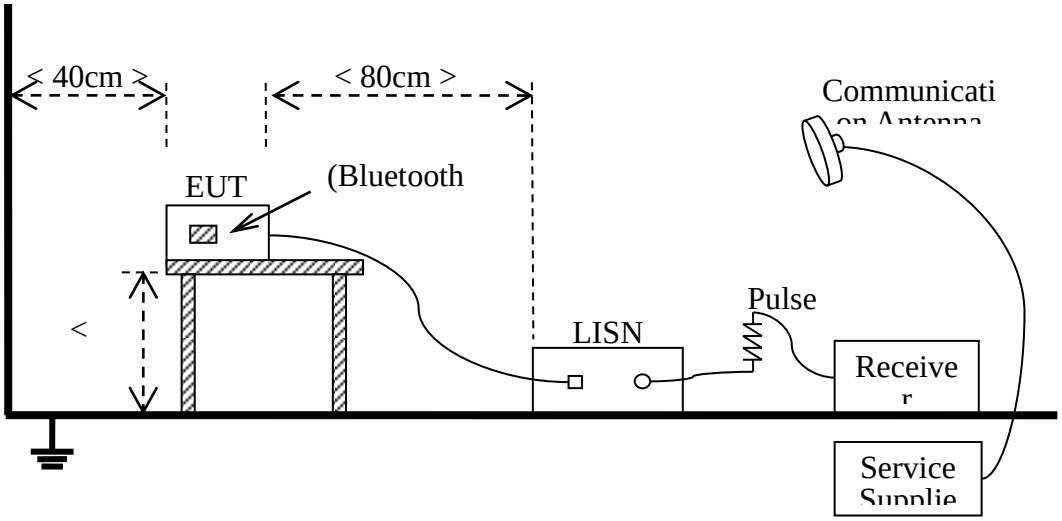
Test Configurations (TC) NO.	Description	
	Signal Description	Operating Frequency
Transmitter		
TC01	GFSK modulation, package type DH5, hopping on	--
TC02	GFSK modulation, package type DH5, hopping off	Ch No. 0/ 2402MHz
TC03	GFSK modulation, package type DH5, hopping off	Ch No. 39/ 2441MHz
TC04	GFSK modulation, package type DH5, hopping off	Ch No. 78/ 2480MHz
TC05	π/4-DQPSK modulation, package type DH5, hopping on	--
TC06	π/4-DQPSK modulation, package type DH5, hopping off	Ch No. 0/ 2402MHz
TC07	π/4-DQPSK modulation, package type DH5, hopping off	Ch No. 39/ 2441MHz
TC08	π/4-DQPSK modulation, package type DH5, hopping off	Ch No. 78/ 2480MHz
TC09	8DPSK modulation, package type DH5, hopping on	--
TC10	8DPSK modulation, package type DH5, hopping off	Ch No. 0/ 2402MHz
TC11	8DPSK modulation, package type DH5, hopping off	Ch No. 39/ 2441MHz
TC12	8DPSK modulation, package type DH5, hopping off	Ch No. 78/ 2480MHz

4.4 Description of Test Setup

4.4.1 For Antenna Port Test

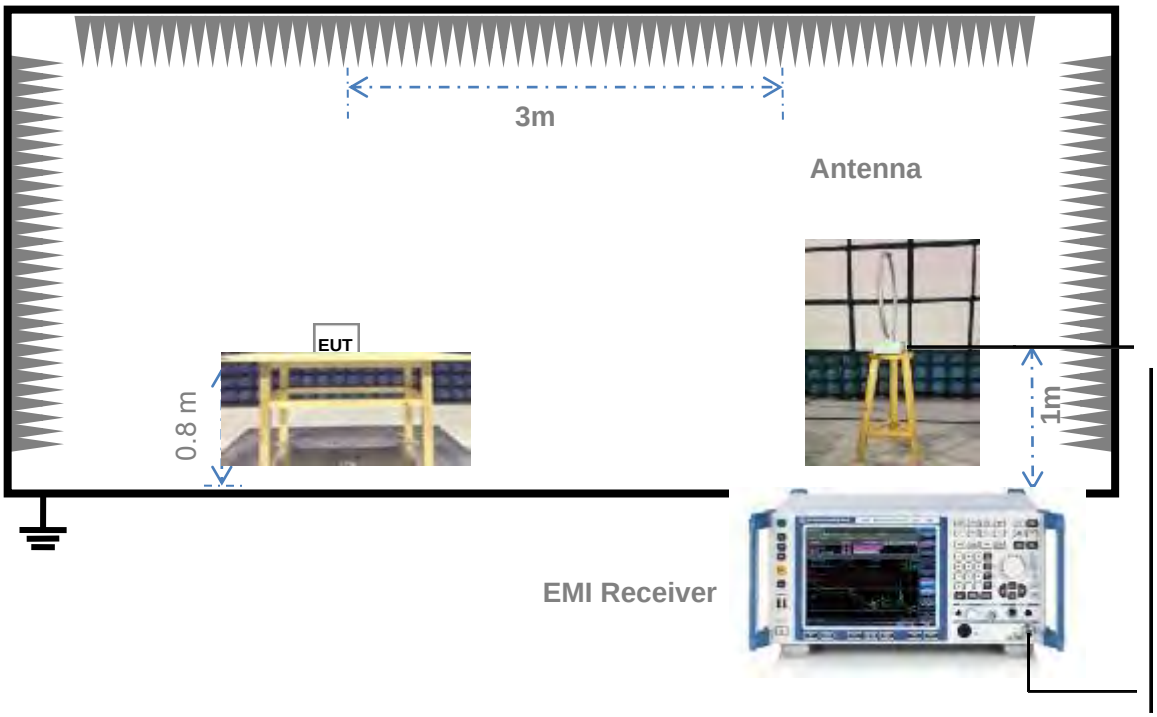
(Diagram 1)

4.4.2 For AC Power Supply Port Test



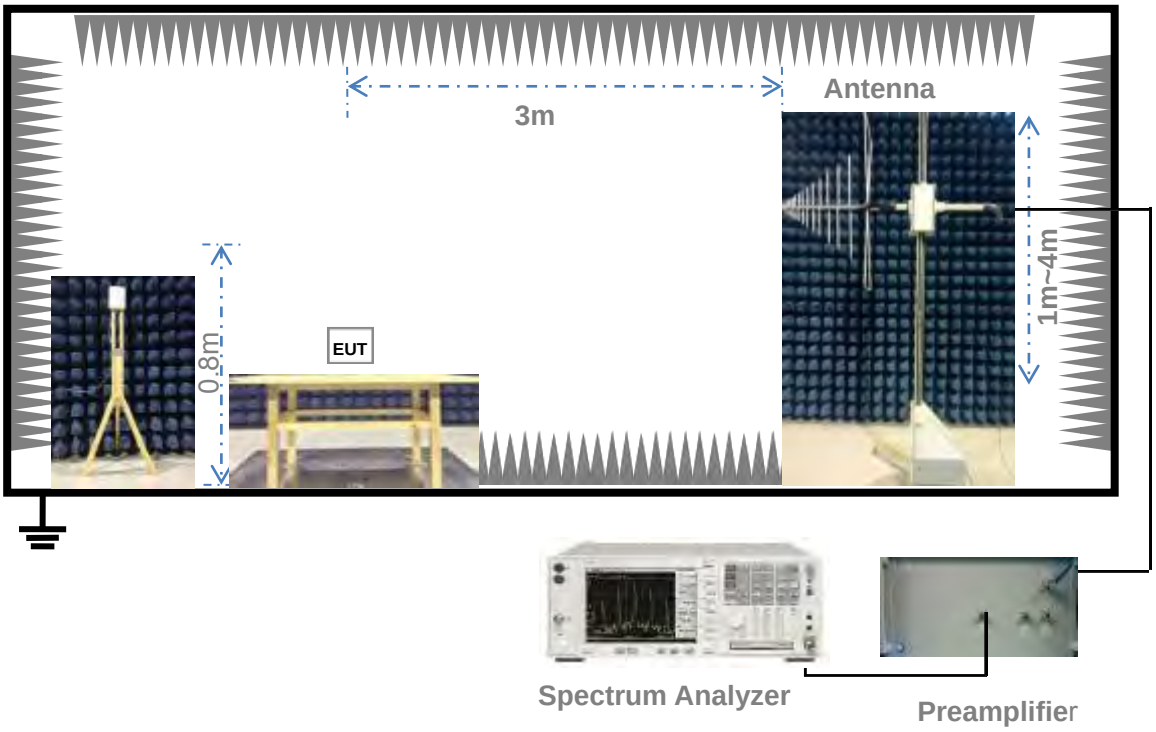
(Diagram 2)

4.4.3 For Radiated Test (Below 30MHz)



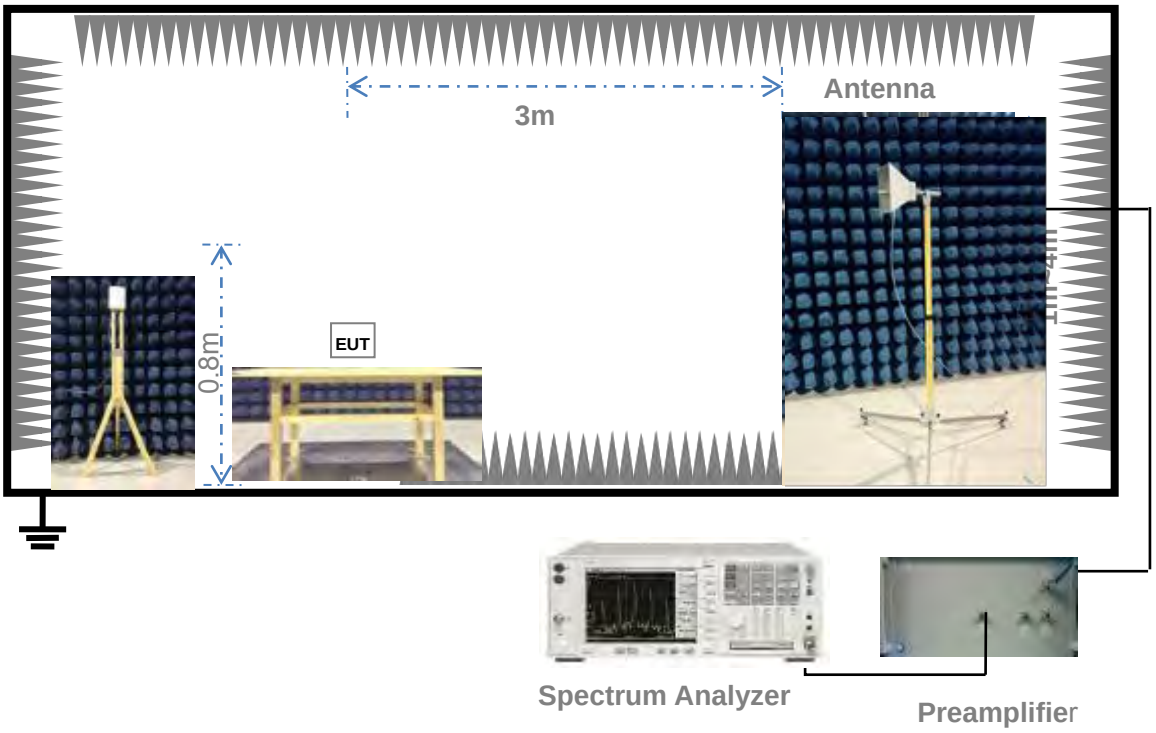
(Diagram 3)

4.4.4 For Radiated Test (30MHz-1GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1GHz)



(Diagram 5)

4.5 Test Conditions

Test Case	Test Conditions		
	Test Env.	Test Setup Note 1	Test Configuration Note 2
20dB Bandwidth	NTNV	Test Setup 1	TC02, TC03, TC04, TC06, TC07, TC08, TC10, TC11, TC12
Conducted Emission	NTNV	Test Setup 2	TC01
Radiated Emission	NTNV	Test Setup 3 Test Setup 4 Test Setup 5	TC01, TC02, TC03, TC04, TC05, TC06, TC07, TC08, TC09, TC10, TC11, TC12
Band Edge	NTNV	Test Setup 5	TC02, TC04, TC06, TV08, TC10, TC12

Note:
1. Please refer to section 4.4 for test setup details.
2. Please refer to section 4.3 for test setup details.

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Standard Applicable

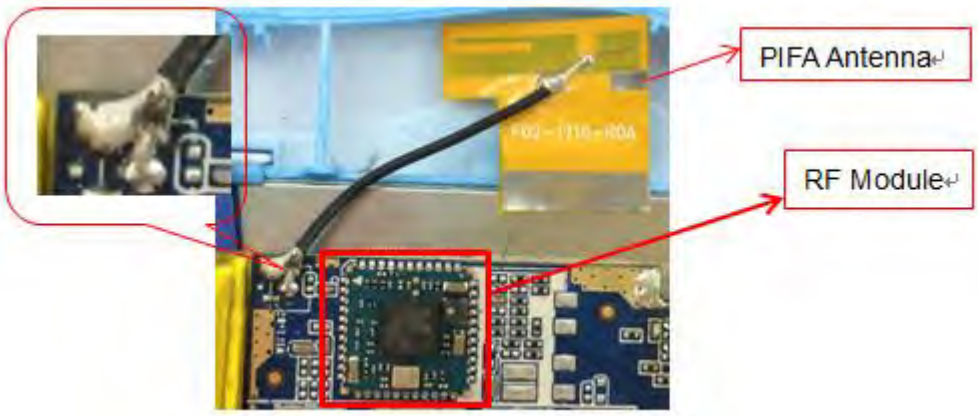
FCC §15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is An embedded-in	The antenna is welded on the mainboard, can't be replaced by the consumer.

Reference Documents	Item
Photo	

5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5.2 20dB Bandwidth

5.2.1 Limit

FCC §15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

5.2.2 Test Procedure

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel

RBW ≥ 1% of the 20 dB bandwidth

VBW ≥ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.3 Conducted Emission

5.3.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.3.2 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

5.4 Radiated Spurious Emission

5.4.1 Limit

FCC §15.249(a)

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μV/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

1. For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
2. For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.4.2 Test Procedure

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented. The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

5.5 Band Edge

5.5.1 Limit

FCC §15.249(a)

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.5.2 Test Procedure

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation

RBW ≥ 1% of the span

VBW ≥ RBW

Sweep = auto

Detector function = peak /AV

Trace = max hold

Allow the trace to stabilize.

E [dBμV/m] =UR + AT + AFactor [dB]; AT =LCable loss [dB]-Gpreamp [dB]

AT: Total correction Factor except Antenna

UR: Receiver Reading

Gpreamp: Preamplifier Gain

AFactor: Antenna Factor at 3m

ANNEX A TEST RESULT

A.1 20dB bandwidth

Test Data

GFSK Mode:

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
0	2402	1.124
39	2441	1.122
78	2480	1.132

∏/4-DQPSK Mode:

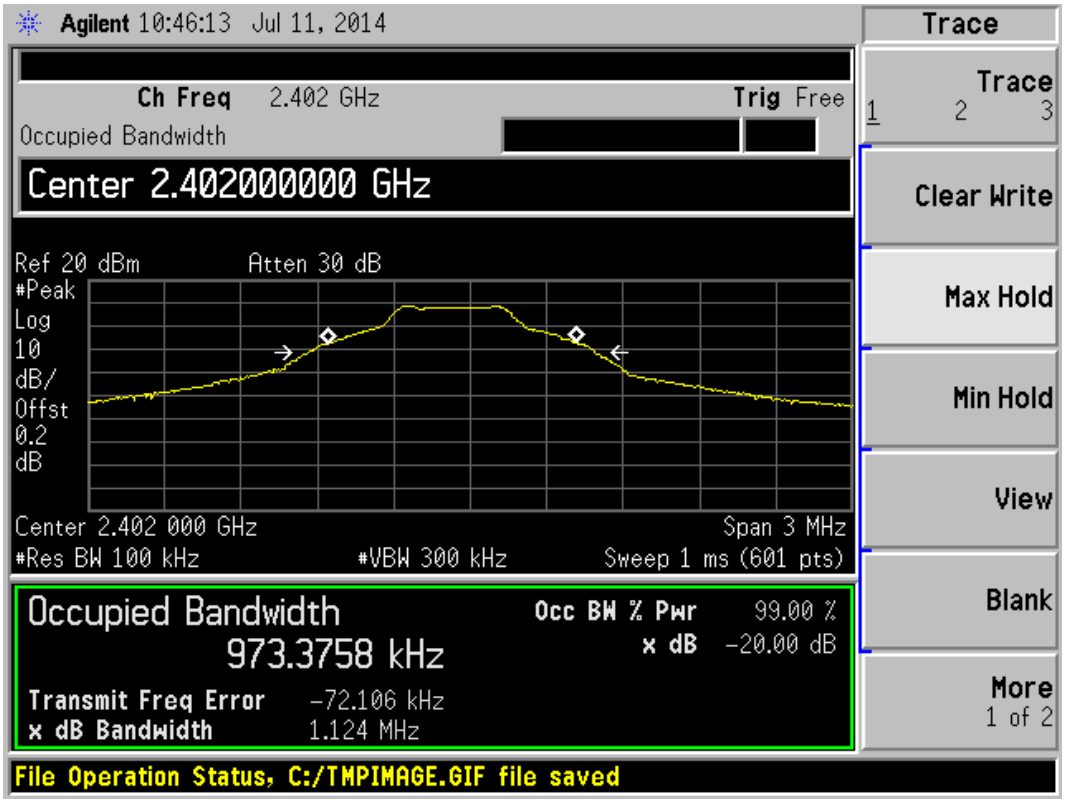
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
0	2402	1.388
39	2441	1.385
78	2480	1.388

8-DPSK Mode:

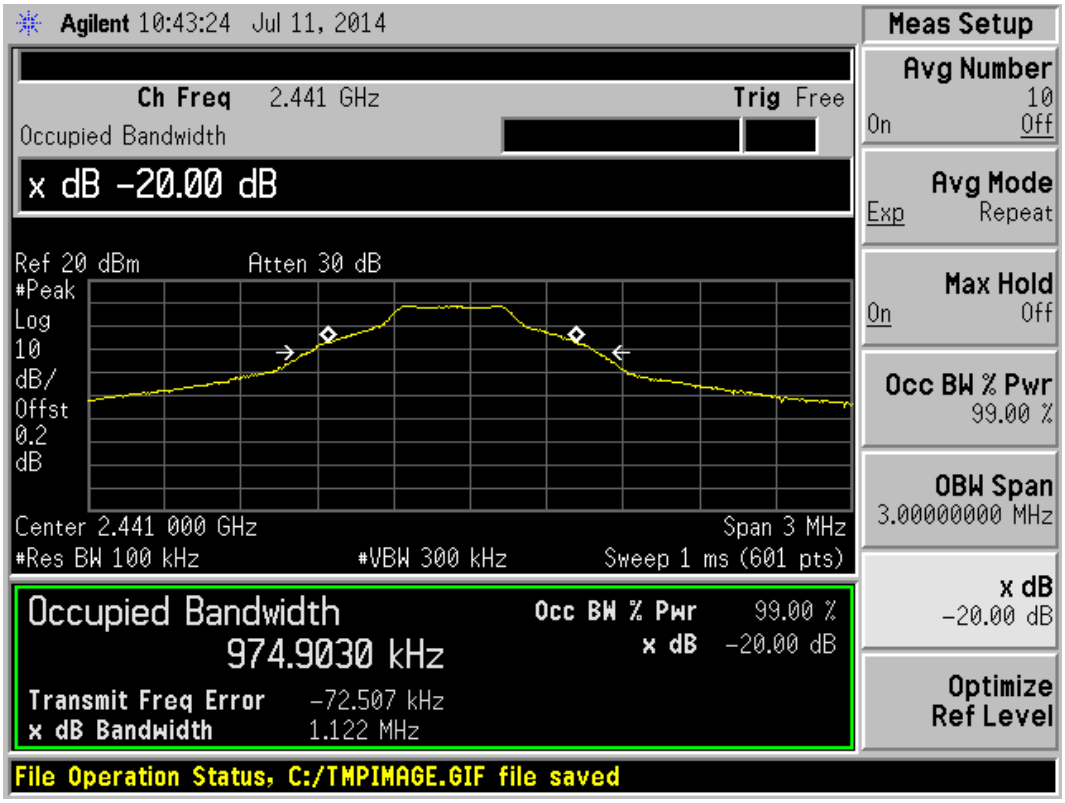
Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
0	2402	1.385
39	2441	1.384
78	2480	1.388

Test plots

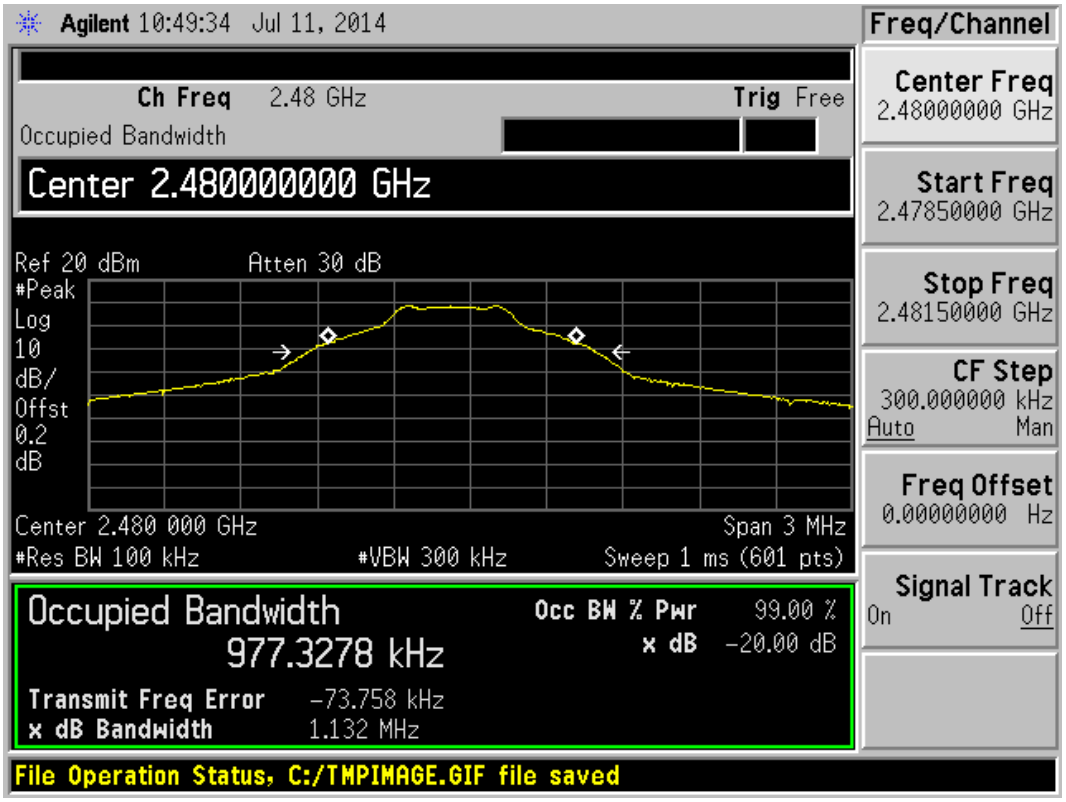
GFSK LOW CHANNEL



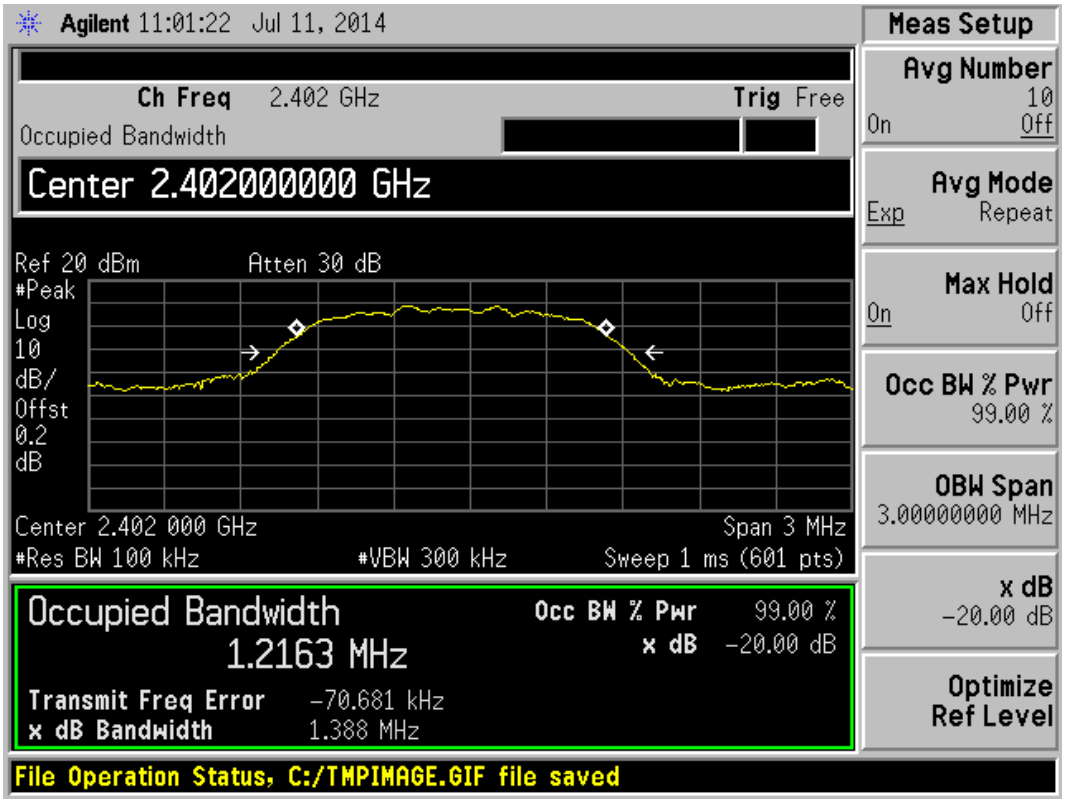
GFSK MID CHANNEL



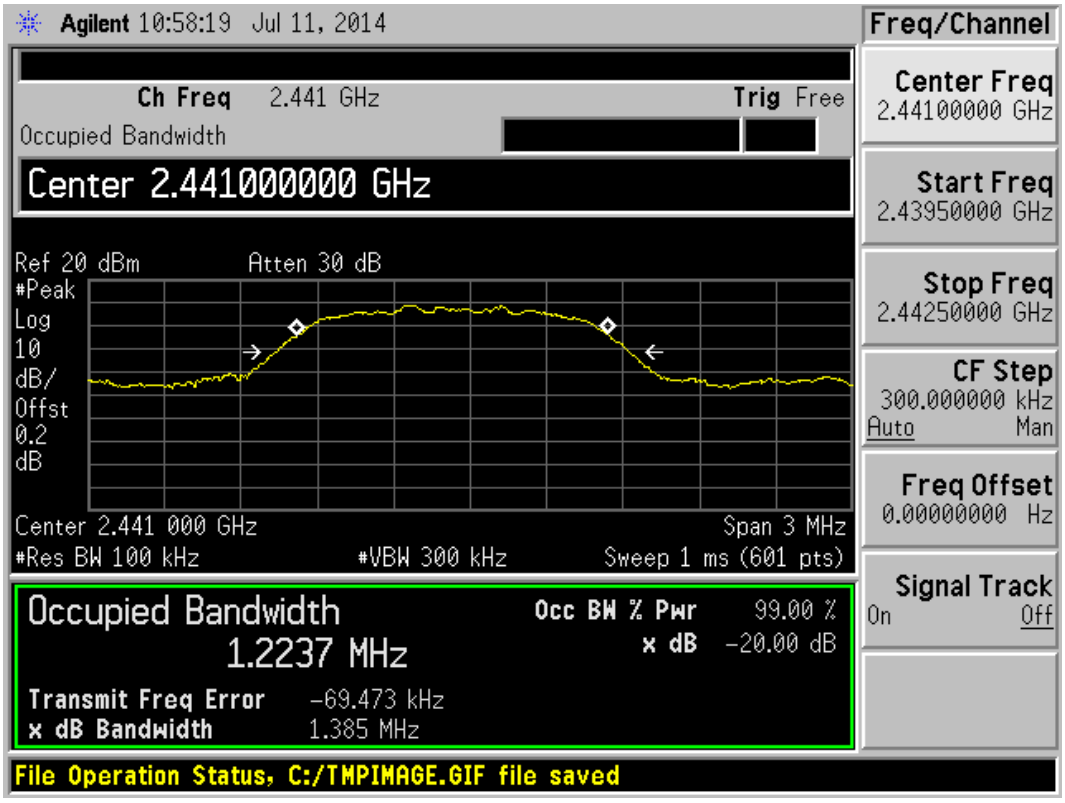
GFSK HIGH CHANNEL



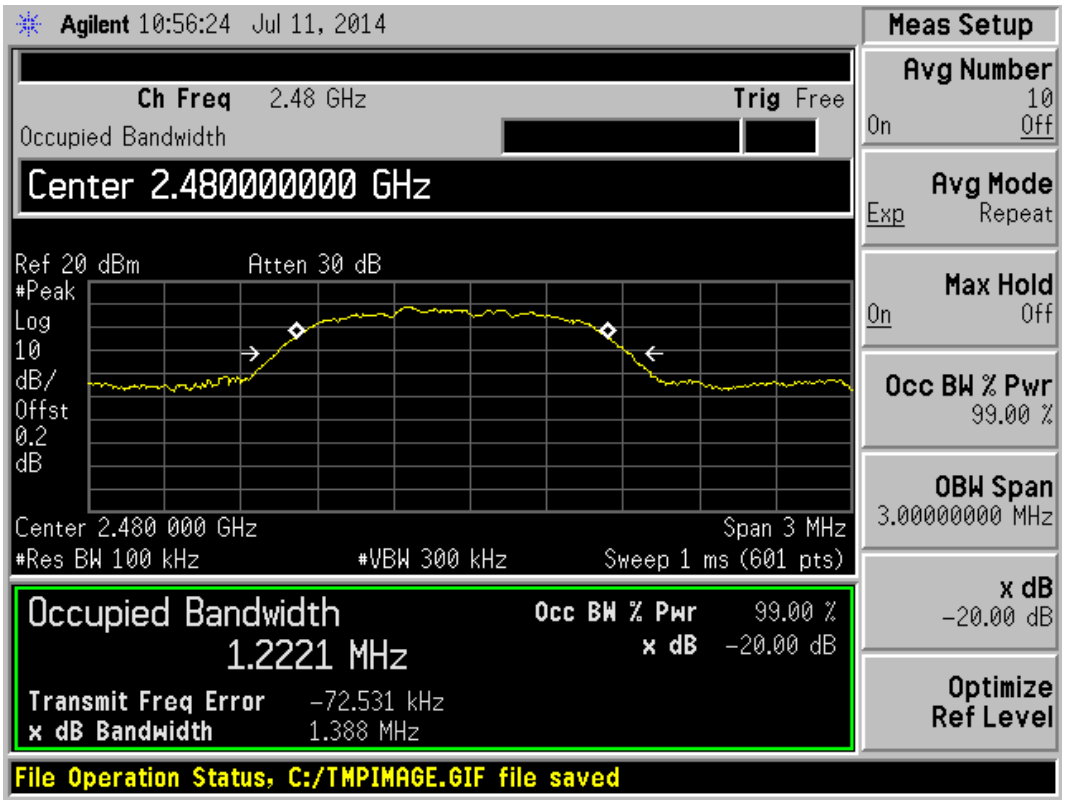
Π/4-DQPSK LOW CHANNEL



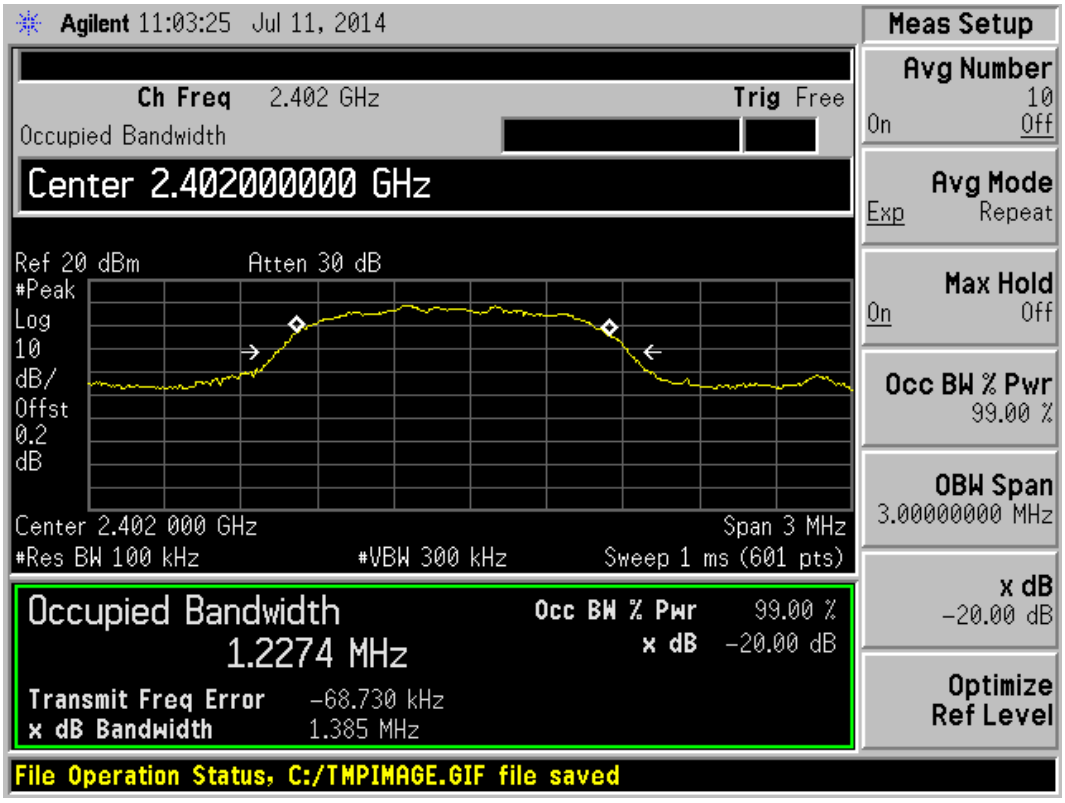
Π/4-DQPSK MID CHANAEL



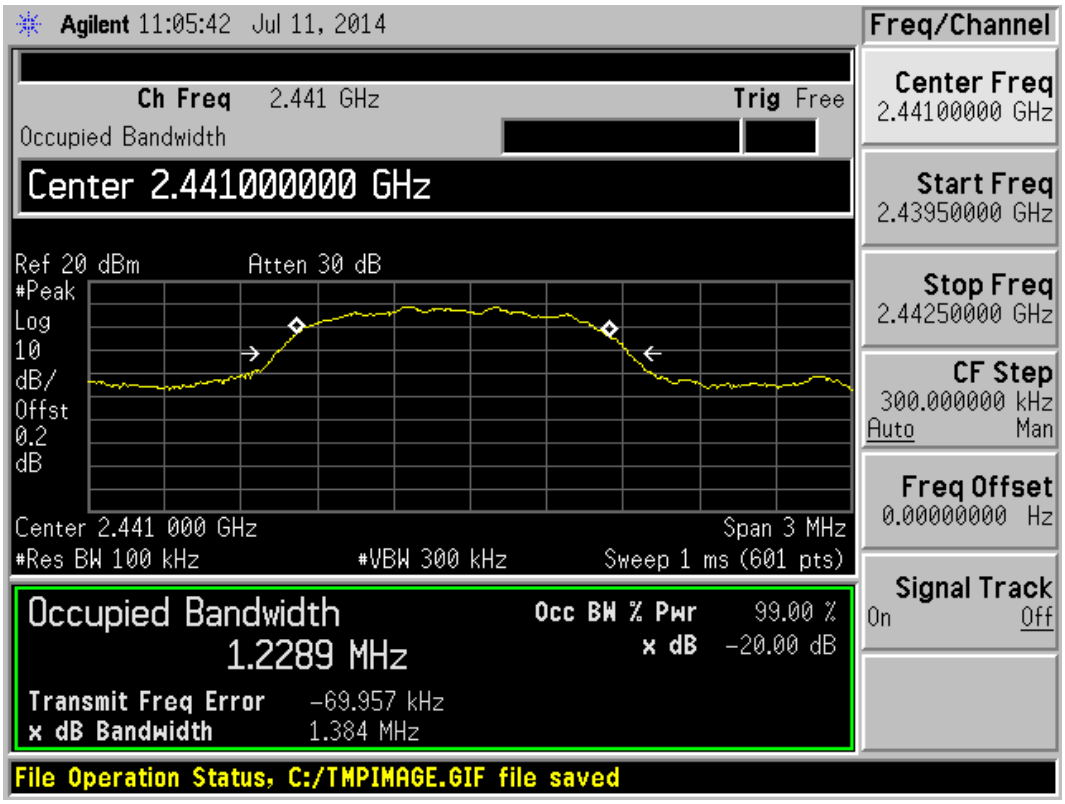
Π/4-DQPSK HIGH CHANNEL



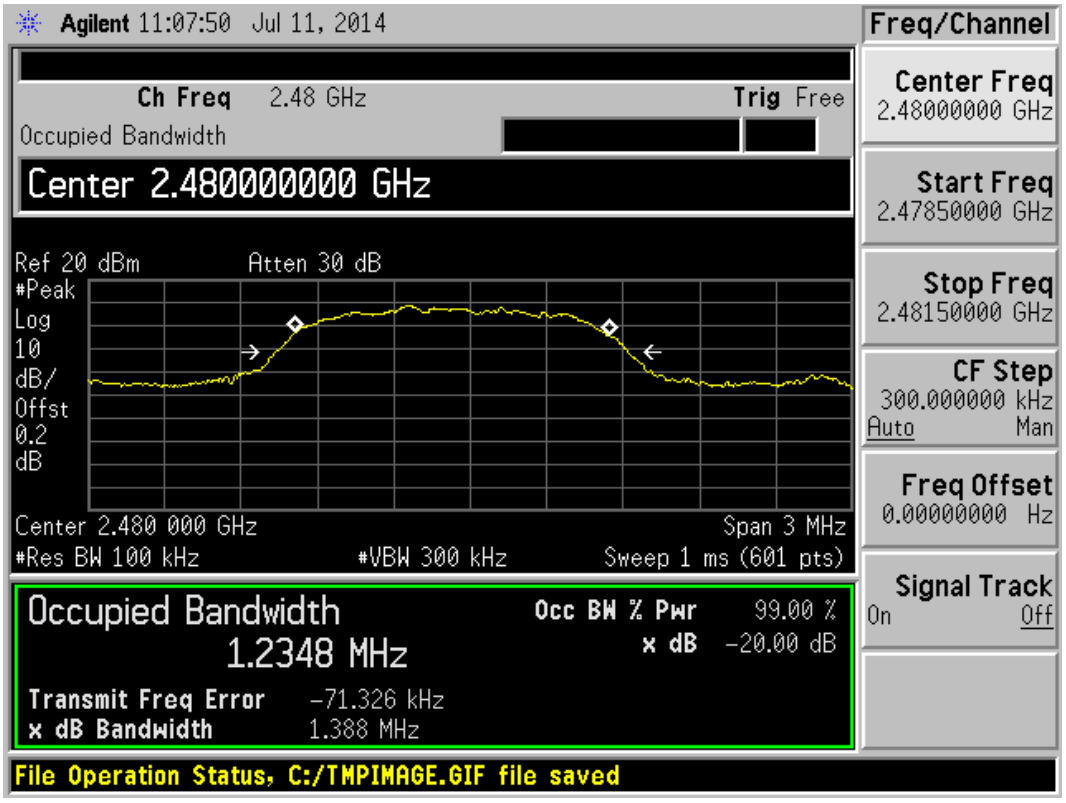
8-DPSK LOW CHANNEL



8-DPSK MID CHANAEL



8-DPSK HIGH CHANNEL



A.2 Conducted Emission

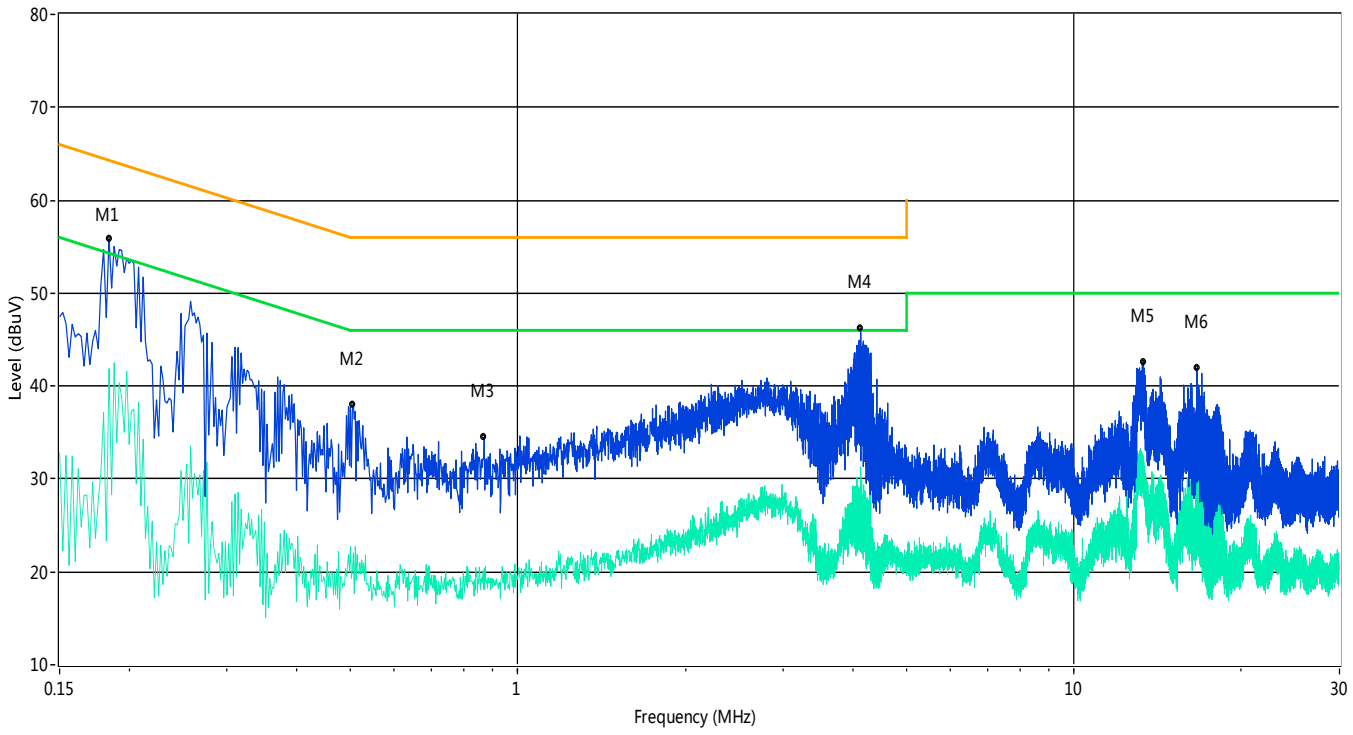
Test Data

Frequency (MHz)	Peak (dBuV)	Q-peak (dBuV)	Average (dBuV)	Factor (dB)	QP Limit (dBuV)	AV Limit (dBuV)	Margin (dB)	Line	Verdict
0.18	55.8	--	41.9	10.00	65.0	55.0	13.10	L Line	PASS
0.51	38.0	--	22.0	10.00	56.0	46.0	24.00	L Line	PASS
0.87	34.5	--	20.4	10.00	56.0	46.0	25.60	L Line	PASS
4.13	46.2	--	31.3	10.00	56.0	46.0	14.70	L Line	PASS
13.32	42.6	--	32.4	10.00	60.0	50.0	17.60	L Line	PASS
16.63	42.0	--	30.5	10.00	60.0	50.0	19.50	L Line	PASS

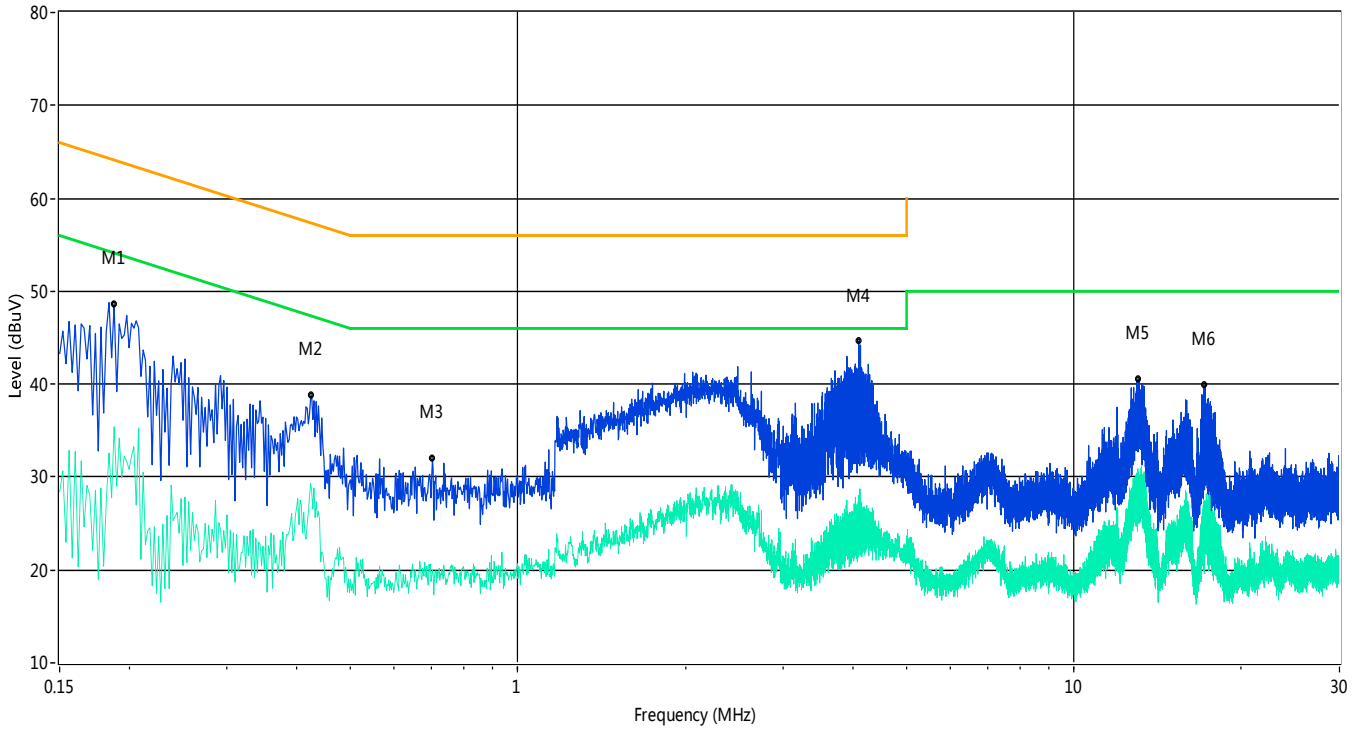
Frequency (MHz)	Peak (dBuV)	Q-peak (dBuV)	Average (dBuV)	Factor (dB)	QP Limit (dBuV)	AV Limit (dBuV)	Margin (dB)	Line	Verdict
0.19	48.5	--	35.4	10.00	64.9	54.9	19.50	N Line	PASS
0.43	38.7	--	28.4	10.00	58.1	48.1	19.70	N Line	PASS
0.70	31.9	--	19.9	10.00	56.0	46.0	26.10	N Line	PASS
4.10	44.7	--	28.0	10.00	56.0	46.0	18.00	N Line	PASS
13.07	40.5	--	30.0	10.00	60.0	50.0	20.00	N Line	PASS
17.21	39.8	--	27.4	10.00	60.0	50.0	22.60	N Line	PASS

Test Plots

PHASE L



PHASE N

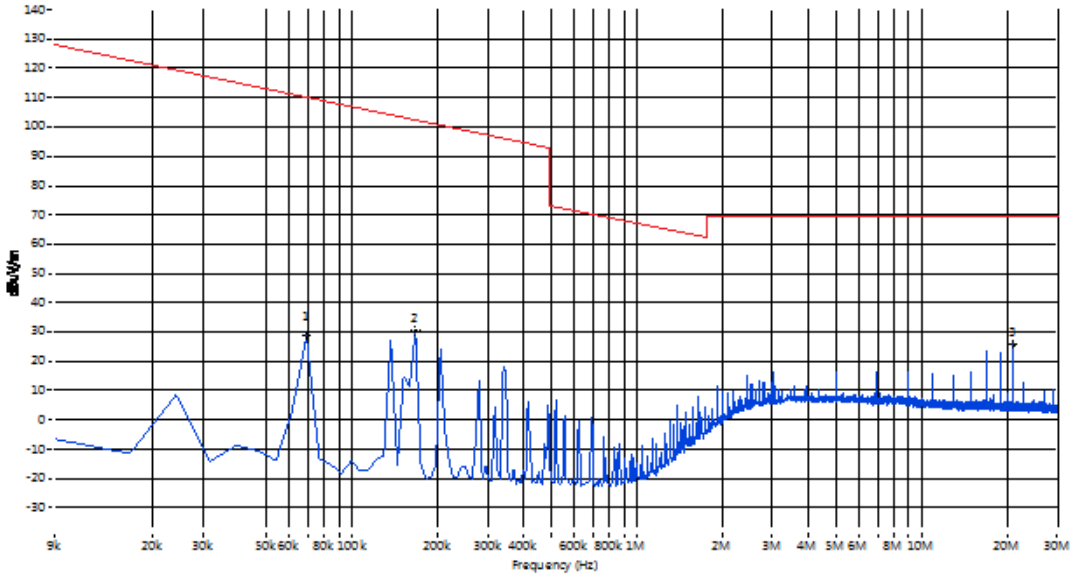

80
70
60
50
40
30
20
10
Level (dBuV)
M1
M2
M3
M4
M5
M6
0.15
1
10
30
Frequency (MHz)

A.3 Radiated Emission

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

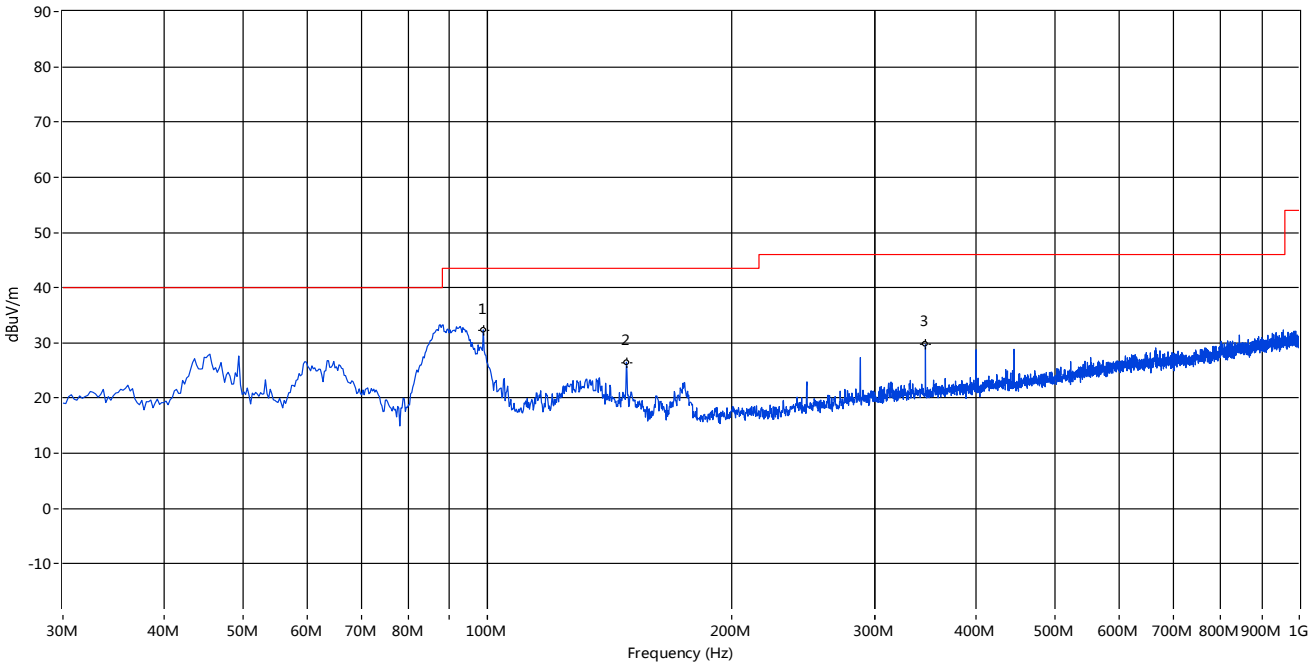
The data of 9 kHz to 1GHz

Below 30MHz



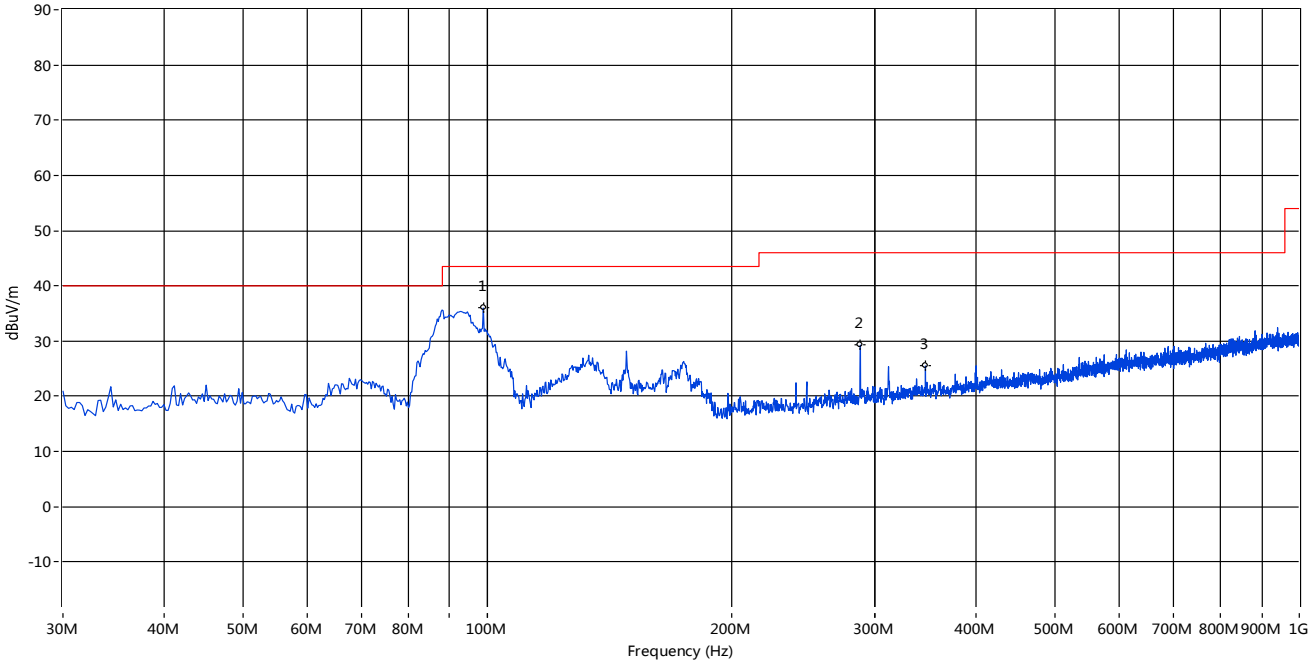
Fre. (MHz)	PK (dBuV/m)	QP (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-QP (dBuV/m)	Limit-AV (dBuV/m)	Degree (^{o})	Verdict
0.069	29.01	--	--	--	110.8	--	--	PASS
0.166	29.60	--	--	--	103.2	--	--	PASS
20.997	25.27	--	--	--	69.5	--	--	PASS

30MHz to 1GHz, ANT V



Fre. (MHz)	PK (dBuV/m)	QP (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-QP (dBuV/m)	Limit-AV (dBuV/m)	Degree (o)	Antenna	Verdict
98.853	32.35	--	--	--	43.5	--	68.0	Vertical	PASS
148.310	26.49	--	--	--	43.5	--	-0.4	Vertical	PASS
346.383	29.68	--	--	--	46.0	--	15.3	Vertical	PASS

30MHz to 1GHz, ANT H



Fre. (MHz)	PK (dBuV/m)	QP (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-QP (dBuV/m)	Limit-AV (dBuV/m)	Degree(o)	Antenna	Verdict
98.853	35.99	--	--	--	43.5	--	357.4	Horizontal	PASS
287.956	29.27	--	--	--	46.0	--	316.8	Horizontal	PASS
346.383	25.50	--	--	--	46.0	--	83.2	Horizontal	PASS

Test Data and Plots(1GHz ~ 10th Harmonic)

GFSK Mode:

LOW CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2402.60	99.71	--	114.0	94.0	2.40	Vertical	Pass
Harmonic and Spurious	1439.56	42.40	--	74.0	54.0	55.50	Vertical	Pass
	1601.40	41.00	--	74.0	54.0	360.00	Vertical	Pass
	2322.68	46.58	--	74.0	54.0	7.90	Vertical	Pass
	2482.52	47.41	--	74.0	54.0	360.00	Vertical	Pass
	4831.17	45.22	--	74.0	54.0	58.70	Vertical	Pass
	7517.47	43.58	--	74.0	54.0	342	Vertical	Pass
	8529.12	43.31	--	74.0	54.0	319	Vertical	Pass
	11627.29	42.42	--	74.0	54.0	179	Vertical	Pass
	13555.74	45.21	--	74.0	54.0	164	Vertical	Pass
	15895.17	46.81	--	74.0	54.0	325	Vertical	Pass
	20321.13	48.04	--	74.0	54.0	44	Vertical	Pass
Fundamental	2402.60	91.25	--	114.0	94.0	291.60	Horizontal	Pass
Harmonic and Spurious	1439.56	43.31	--	74.0	54.0	30.50	Horizontal	Pass
	1623.38	39.31	--	74.0	54.0	35.40	Horizontal	Pass
	2194.81	41.67	--	74.0	54.0	248.30	Horizontal	Pass
	4120.88	42.89	--	74.0	54.0	275.00	Horizontal	Pass
	4915.08	45.91	--	74.0	54.0	170.70	Horizontal	Pass
	7232.95	43.53	--	74.0	54.0	74	Vertical	Pass
	8307.82	43.53	--	74.0	54.0	172	Vertical	Pass
	11627.29	42.59	--	74.0	54.0	346	Vertical	Pass
	12386.02	44.33	--	74.0	54.0	109	Vertical	Pass
	15895.17	45.82	--	74.0	54.0	20	Vertical	Pass
	21143.09	48.05	--	74.0	54.0	345	Vertical	Pass
MID CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2440.56	96.58	--	114.0	94.0	294.80	Vertical	Pass
Harmonic and Spurious	1439.56	42.70	--	74.0	54.0	35.40	Vertical	Pass
	2168.83	41.58	--	74.0	54.0	322.40	Vertical	Pass
	2492.51	44.07	--	74.0	54.0	301.40	Vertical	Pass
	4285.71	42.63	--	74.0	54.0	209.80	Vertical	Pass
	5349.65	46.08	--	74.0	54.0	184.30	Vertical	Pass
	7232.95	44.08	--	74.0	54.0	334	Vertical	Pass
	8307.82	43.86	--	74.0	54.0	147	Vertical	Pass
	11595.67	42.88	--	74.0	54.0	83	Vertical	Pass
	13745.42	45.78	--	74.0	54.0	193	Vertical	Pass
	16590.68	46.01	--	74.0	54.0	340	Vertical	Pass
	23039.93	47.85	--	74.0	54.0	115	Vertical	Pass

Fundamental	2440.56	96.58	--	114.0	94.0	294.80	Horizontal	Pass
Harmonic and Spurious	1439.56	42.70	--	74.0	54.0	35.40	Horizontal	Pass
	2168.83	41.58	--	74.0	54.0	322.40	Horizontal	Pass
	2492.51	44.07	--	74.0	54.0	301.40	Horizontal	Pass
	4285.71	42.63	--	74.0	54.0	209.80	Horizontal	Pass
	5349.65	46.08	--	74.0	54.0	184.30	Horizontal	Pass
	7138.10	43.90	--	74.0	54.0	17	Horizontal	Pass
	8307.82	44.31	--	74.0	54.0	344	Horizontal	Pass
	10678.87	42.63	--	74.0	54.0	294	Horizontal	Pass
	13998.34	45.62	--	74.0	54.0	191	Horizontal	Pass
	15895.17	46.27	--	74.0	54.0	352	Horizontal	Pass
	20194.68	48.23	--	74.0	54.0	146	Horizontal	Pass
HIGH CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2478.52	104.47	--	114.0	94.0	68.80	Vertical	Pass
Harmonic and Spurious	1439.56	45.87	--	74.0	54.0	55.10	Vertical	Pass
	2162.84	47.64	--	74.0	54.0	138.10	Vertical	Pass
	2198.80	47.63	--	74.0	54.0	145.10	Vertical	Pass
	2398.60	49.76	--	74.0	54.0	68.80	Vertical	Pass
	4060.94	45.73	--	74.0	54.0	26.60	Vertical	Pass
	7232.95	43.53	--	74.0	54.0	30	Vertical	Pass
	8307.82	44.28	--	74.0	54.0	25	Vertical	Pass
	10647.25	42.36	--	74.0	54.0	235	Vertical	Pass
	14156.41	46.24	--	74.0	54.0	313	Vertical	Pass
	15895.17	45.96	--	74.0	54.0	158	Vertical	Pass
	21143.09	48.04	--	74.0	54.0	351	Vertical	Pass
Fundamental	2478.52	94.69	--	114.0	94.0	0	Horizontal	Pass
Harmonic and Spurious	1439.56	41.85	--	74.0	54.0	20.30	Horizontal	Pass
	1991.01	53.16	--	74.0	54.0	54.80	Horizontal	Pass
	2804.20	46.85	--	74.0	54.0	217.80	Horizontal	Pass
	4330.67	46.35	--	74.0	54.0	280.70	Horizontal	Pass
	4771.23	47.35	--	74.0	54.0	359.40	Horizontal	Pass
	7138.10	43.89	--	74.0	54.0	282	Horizontal	Pass
	8023.29	44.41	--	74.0	54.0	277	Horizontal	Pass
	10520.80	42.60	--	74.0	54.0	160	Horizontal	Pass
	14156.41	46.26	--	74.0	54.0	87	Horizontal	Pass
	16748.75	45.59	--	74.0	54.0	116	Horizontal	Pass
	20321.13	48.05	--	74.0	54.0	110	Horizontal	Pass

Π/4-DQPSK Mode:

LOW CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2402.60	105.68	--	114.0	94.0	74.80	Vertical	Pass
Harmonic and Spurious	1439.56	46.13	--	74.0	54.0	34.40	Vertical	Pass
	2200.80	50.26	--	74.0	54.0	137.70	Vertical	Pass
	2480.52	48.62	--	74.0	54.0	74.80	Vertical	Pass
	2766.23	47.27	--	74.0	54.0	151.40	Vertical	Pass
	3992.01	45.70	--	74.0	54.0	77.00	Vertical	Pass
	7106.49	43.06	--	74.0	54.0	281	Vertical	Pass
	8371.05	43.26	--	74.0	54.0	54	Vertical	Pass
	10678.87	42.59	--	74.0	54.0	104	Vertical	Pass
	13555.74	44.88	--	74.0	54.0	114	Vertical	Pass
	16495.84	45.46	--	74.0	54.0	123	Vertical	Pass
	20194.68	47.50	--	74.0	54.0	204	Vertical	Pass
Fundamental	2402.60	95.90	--	114.0	94.0	130.80	Horizontal	Pass
Harmonic and Spurious	1439.56	45.86	--	74.0	54.0	19.70	Horizontal	Pass
	2814.19	45.98	--	74.0	54.0	351.70	Horizontal	Pass
	3587.41	44.48	--	74.0	54.0	6.90	Horizontal	Pass
	4123.88	45.33	--	74.0	54.0	197.40	Horizontal	Pass
	4744.26	47.23	--	74.0	54.0	176.20	Horizontal	Pass
	7865.22	44.30	--	74.0	54.0	102	Horizontal	Pass
	9319.47	43.69	--	74.0	54.0	191	Horizontal	Pass
	14219.63	45.79	--	74.0	54.0	238	Horizontal	Pass
	15895.17	46.30	--	74.0	54.0	338	Horizontal	Pass
	18424.29	46.18	--	74.0	54.0	39	Horizontal	Pass
	20321.13	47.55	--	74.0	54.0	219	Horizontal	Pass
MID CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2440.56	105.02	--	114.0	94.0	2.20	Vertical	Pass
Harmonic and Spurious	1439.56	42.37	--	74.0	54.0	358.20	Vertical	Pass
	1627.37	40.97	--	74.0	54.0	360.00	Vertical	Pass
	2360.64	48.25	--	74.0	54.0	360.00	Vertical	Pass
	2520.48	48.16	--	74.0	54.0	2.20	Vertical	Pass
	2768.23	45.07	--	74.0	54.0	13.10	Vertical	Pass
	7169.72	43.07	--	74.0	54.0	220	Vertical	Pass
	9319.47	43.91	--	74.0	54.0	355	Vertical	Pass
	13207.99	45.48	--	74.0	54.0	27	Vertical	Pass
	15895.17	45.32	--	74.0	54.0	129	Vertical	Pass
	18139.77	45.34	--	74.0	54.0	190	Vertical	Pass
	20004.99	47.55	--	74.0	54.0	28	Vertical	Pass
Fundamental	2440.56	96.30	--	114.0	94.0	56.00	Horizontal	Pass

Harmonic and Spurious	1439.56	43.10	--	74.0	54.0	21.20	Horizontal	Pass
	2946.05	43.83	--	74.0	54.0	21.20	Horizontal	Pass
	4306.69	43.79	--	74.0	54.0	313.30	Horizontal	Pass
	4978.02	45.35	--	74.0	54.0	17.30	Horizontal	Pass
	5382.62	46.85	--	74.0	54.0	32.20	Horizontal	Pass
	7138.10	43.81	--	74.0	54.0	270	Horizontal	Pass
	8845.26	43.38	--	74.0	54.0	201	Horizontal	Pass
	14156.41	45.86	--	74.0	54.0	284	Horizontal	Pass
	15895.17	45.65	--	74.0	54.0	172	Horizontal	Pass
	17697.17	45.50	--	74.0	54.0	24	Horizontal	Pass
	20321.13	47.85	--	74.0	54.0	222	Horizontal	Pass
HIGH CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2480.52	104.32	--	114.0	94.0	74.10	Vertical	Pass
Harmonic and Spurious	1439.56	45.98	--	74.0	54.0	39.70	Vertical	Pass
	2080.92	46.87	--	74.0	54.0	227.40	Vertical	Pass
	2120.88	47.08	--	74.0	54.0	144.10	Vertical	Pass
	2158.84	47.16	--	74.0	54.0	130.00	Vertical	Pass
	4387.61	47.10	--	74.0	54.0	132.40	Vertical	Pass
	7169.72	43.55	--	74.0	54.0	337	Vertical	Pass
	8845.26	43.41	--	74.0	54.0	269	Vertical	Pass
	14219.63	46.32	--	74.0	54.0	193	Vertical	Pass
	16590.68	46.21	--	74.0	54.0	2	Vertical	Pass
	17918.47	45.09	--	74.0	54.0	62	Vertical	Pass
	20321.13	47.49	--	74.0	54.0	258	Vertical	Pass
Fundamental	2478.52	94.78	--	114.0	94.0	201.20	Horizontal	Pass
Harmonic and Spurious	1439.56	45.48	--	74.0	54.0	319.40	Horizontal	Pass
	2856.14	46.27	--	74.0	54.0	62.60	Horizontal	Pass
	3830.17	44.27	--	74.0	54.0	0.20	Horizontal	Pass
	4858.14	48.19	--	74.0	54.0	35.90	Horizontal	Pass
	5448.55	47.34	--	74.0	54.0	334.30	Horizontal	Pass
	7391.01	43.68	--	74.0	54.0	217	Horizontal	Pass
	8845.26	42.25	--	74.0	54.0	200	Horizontal	Pass
	14219.63	45.58	--	74.0	54.0	282	Horizontal	Pass
	15895.17	45.78	--	74.0	54.0	298	Horizontal	Pass
	18139.77	45.63	--	74.0	54.0	114	Horizontal	Pass
	20985.02	47.63	--	74.0	54.0	118	Horizontal	Pass

8-DPSK Mode:

LOW CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2402.60	105.51	--	114.0	94.0	73.60	Vertical	Pass
Harmonic and Spurious	1439.56	45.79	--	74.0	54.0	254.90	Vertical	Pass
	2160.84	48.11	--	74.0	54.0	136.40	Vertical	Pass
	2200.80	48.26	--	74.0	54.0	143.10	Vertical	Pass
	2320.68	48.24	--	74.0	54.0	73.60	Vertical	Pass
	2480.52	50.12	--	74.0	54.0	66.50	Vertical	Pass
	7169.72	43.66	--	74.0	54.0	295	Vertical	Pass
	8845.26	43.26	--	74.0	54.0	264	Vertical	Pass
	14219.63	46.48	--	74.0	54.0	267	Vertical	Pass
	15895.17	45.34	--	74.0	54.0	203	Vertical	Pass
	17697.17	45.40	--	74.0	54.0	92	Vertical	Pass
	20321.13	48.08	--	74.0	54.0	206	Vertical	Pass
Fundamental	2402.60	95.50	--	114.0	94.0	136.40	Horizontal	Pass
Harmonic and Spurious	1439.56	45.33	--	74.0	54.0	18.40	Horizontal	Pass
	2928.07	46.91	--	74.0	54.0	60.20	Horizontal	Pass
	3875.12	44.43	--	74.0	54.0	232.60	Horizontal	Pass
	4786.21	48.05	--	74.0	54.0	243.00	Horizontal	Pass
	5454.55	46.63	--	74.0	54.0	131.10	Horizontal	Pass
	7232.95	43.72	--	74.0	54.0	357	Horizontal	Pass
	8750.42	43.24	--	74.0	54.0	284	Horizontal	Pass
	13207.99	45.10	--	74.0	54.0	158	Horizontal	Pass
	15895.17	46.54	--	74.0	54.0	236	Horizontal	Pass
	18424.29	46.17	--	74.0	54.0	194	Horizontal	Pass
	21143.09	47.88	--	74.0	54.0	237	Horizontal	Pass
MID CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2440.56	106.90	--	114.0	94.0	360.00	Vertical	Pass
Harmonic and Spurious	1439.56	47.32	--	74.0	54.0	52.40	Vertical	Pass
	1999.00	47.06	--	74.0	54.0	212.70	Vertical	Pass
	2360.64	51.27	--	74.0	54.0	331.50	Vertical	Pass
	2520.48	51.63	--	74.0	54.0	338.60	Vertical	Pass
	4708.29	48.09	--	74.0	54.0	358.70	Vertical	Pass
	7138.10	43.86	--	74.0	54.0	322	Vertical	Pass
	8845.26	42.76	--	74.0	54.0	17	Vertical	Pass
	14156.41	46.08	--	74.0	54.0	203	Vertical	Pass
	15895.17	46.81	--	74.0	54.0	334	Vertical	Pass
	17697.17	44.89	--	74.0	54.0	30	Vertical	Pass
	20321.13	47.20	--	74.0	54.0	150	Vertical	Pass
Fundamental	2440.56	98.69	--	114.0	94.0	291.10	Horizontal	Pass
Harmonic	1439.56	46.72	--	74.0	54.0	19.10	Horizontal	Pass

and Spurious	1999.00	45.21	--	74.0	54.0	61.30	Horizontal	Pass
	2916.08	46.94	--	74.0	54.0	33.20	Horizontal	Pass
	4498.50	48.41	--	74.0	54.0	173.90	Horizontal	Pass
	5442.56	47.20	--	74.0	54.0	138.20	Horizontal	Pass
	7232.95	43.40	--	74.0	54.0	275	Horizontal	Pass
	8307.82	43.74	--	74.0	54.0	233	Horizontal	Pass
	13207.99	44.29	--	74.0	54.0	267	Horizontal	Pass
	15895.17	46.56	--	74.0	54.0	240	Horizontal	Pass
	17475.87	46.42	--	74.0	54.0	292	Horizontal	Pass
	21143.09	47.93	--	74.0	54.0	251	Horizontal	Pass
HIGH CHANNEL								
Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2478.52	104.13	--	114.0	94.0	80.60	Vertical	Pass
Harmonic and Spurious	1211.79	46.90	--	74.0	54.0	-0.00	Vertical	Pass
	1439.56	46.79	--	74.0	54.0	66.80	Vertical	Pass
	2162.84	47.22	--	74.0	54.0	149.70	Vertical	Pass
	2558.44	47.95	--	74.0	54.0	80.60	Vertical	Pass
	4465.53	47.02	--	74.0	54.0	98.20	Vertical	Pass
	7138.10	43.83	--	74.0	54.0	298	Vertical	Pass
	8023.29	44.50	--	74.0	54.0	336	Vertical	Pass
	13745.42	45.74	--	74.0	54.0	20	Vertical	Pass
	16590.68	46.11	--	74.0	54.0	233	Vertical	Pass
	18424.29	46.21	--	74.0	54.0	150	Vertical	Pass
	21143.09	47.04	--	74.0	54.0	221	Vertical	Pass
Fundamental	2478.52	94.72	--	114.0	94.0	199.80	Horizontal	Pass
Harmonic and Spurious	1439.56	45.57	--	74.0	54.0	20.30	Horizontal	Pass
	2396.60	46.91	--	74.0	54.0	234.60	Horizontal	Pass
	2870.13	46.53	--	74.0	54.0	269.00	Horizontal	Pass
	3602.40	44.41	--	74.0	54.0	285.00	Horizontal	Pass
	4843.16	48.19	--	74.0	54.0	-0.20	Horizontal	Pass
	7327.79	43.79	--	74.0	54.0	46	Horizontal	Pass
	8023.29	43.80	--	74.0	54.0	331	Horizontal	Pass
	13207.99	45.55	--	74.0	54.0	124	Horizontal	Pass
	15895.17	45.66	--	74.0	54.0	139	Horizontal	Pass
	17475.87	46.40	--	74.0	54.0	52	Horizontal	Pass
	21143.09	47.09	--	74.0	54.0	297	Horizontal	Pass

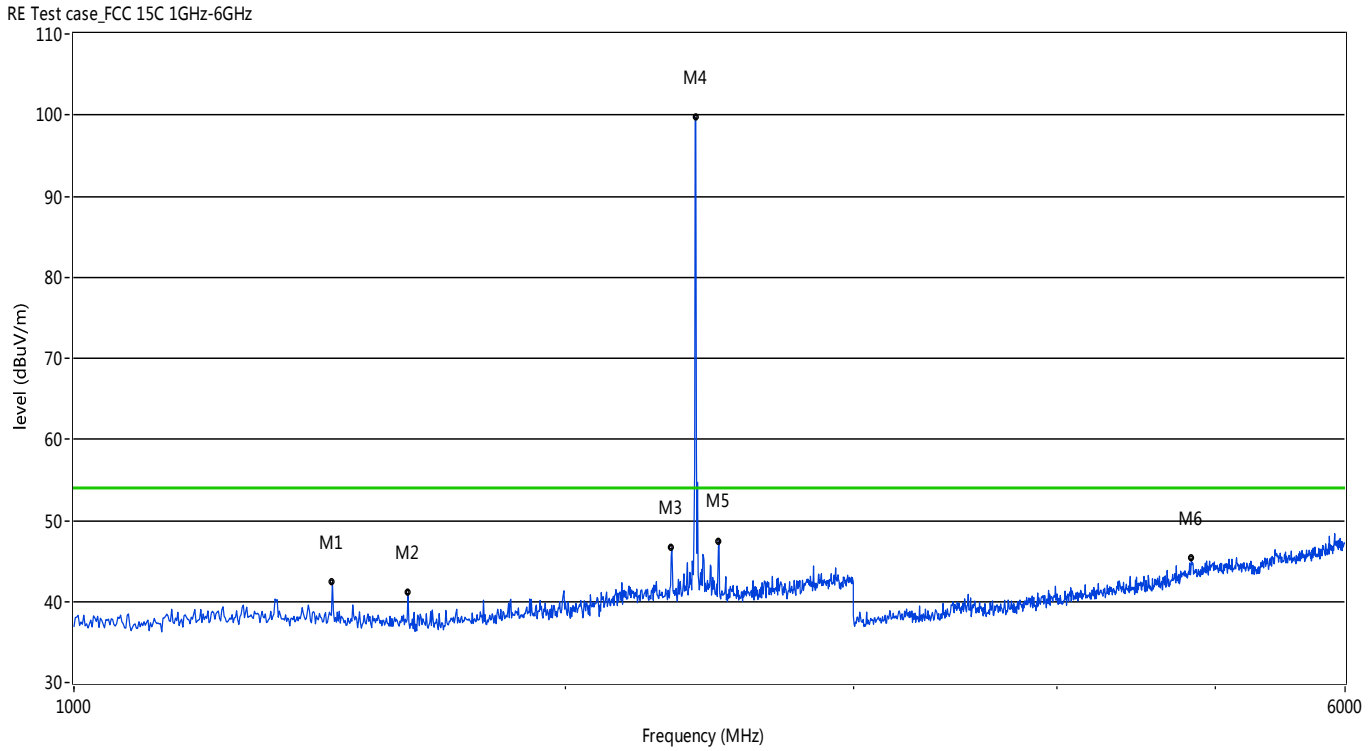
Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

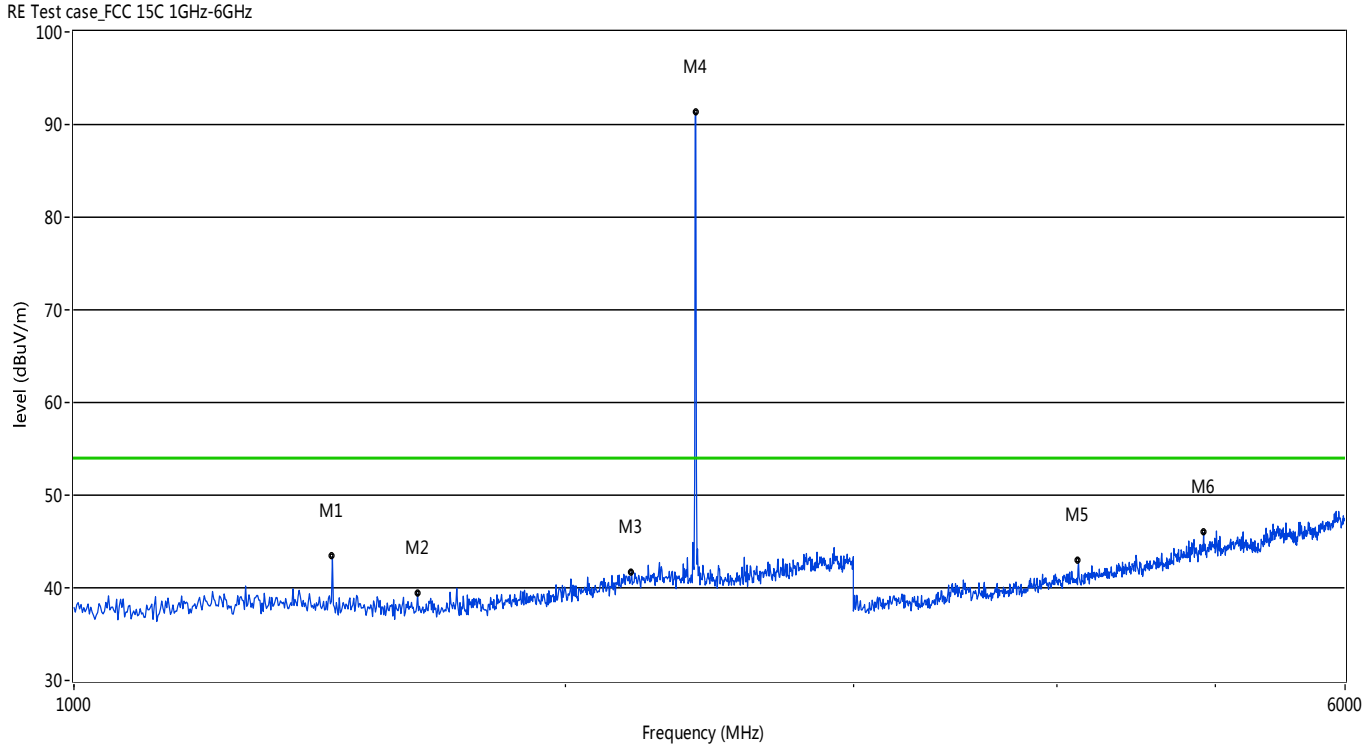
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.

3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

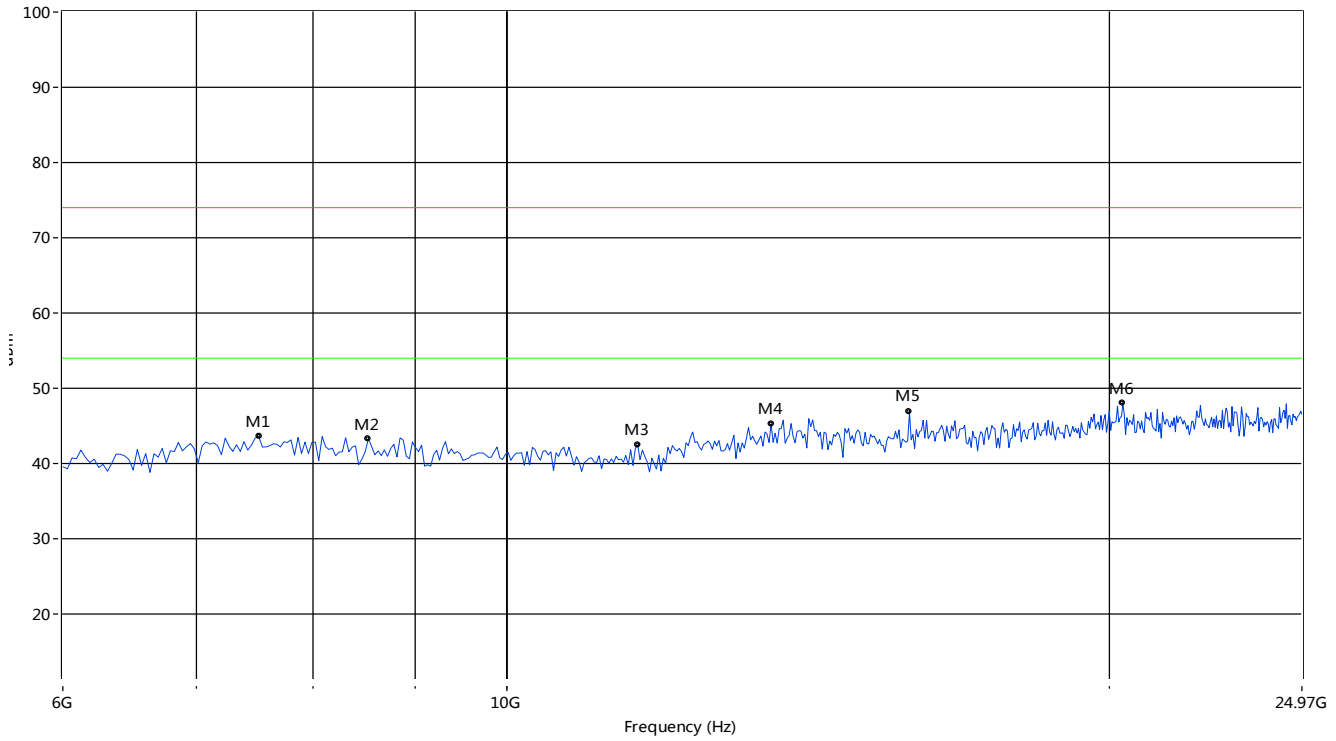
GFSK LOW CHANNEL 1GHz to 6GHz, ANT V



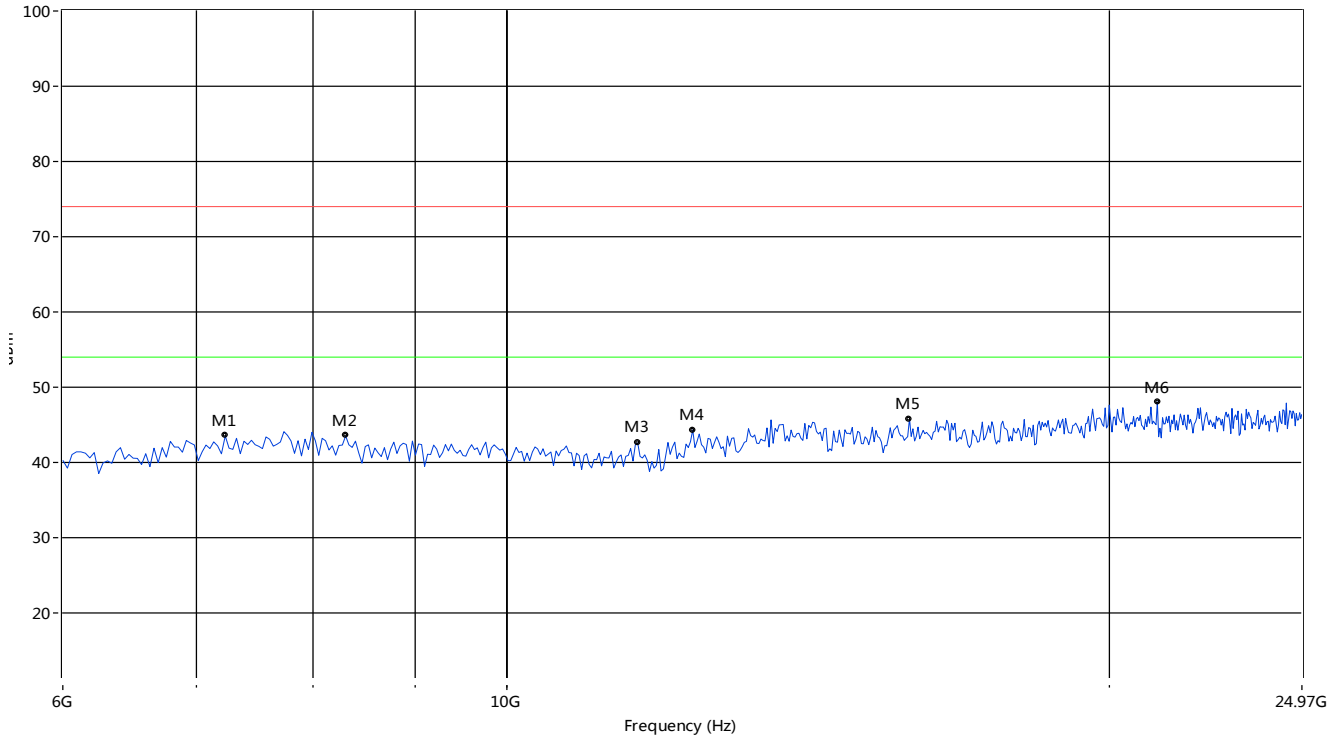
GFSK LOW CHANNEL 1GHz to 6GHz, ANT H



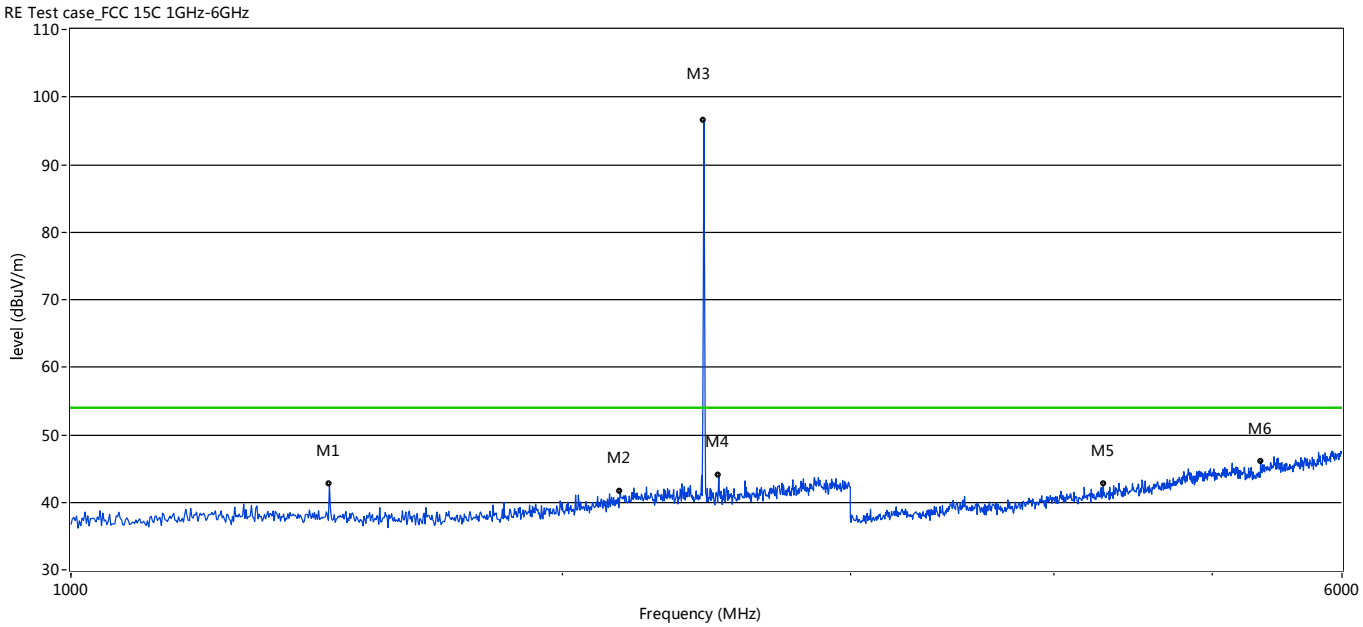
GFSK LOW CHANNEL 6GHz to 25GHz, ANT V



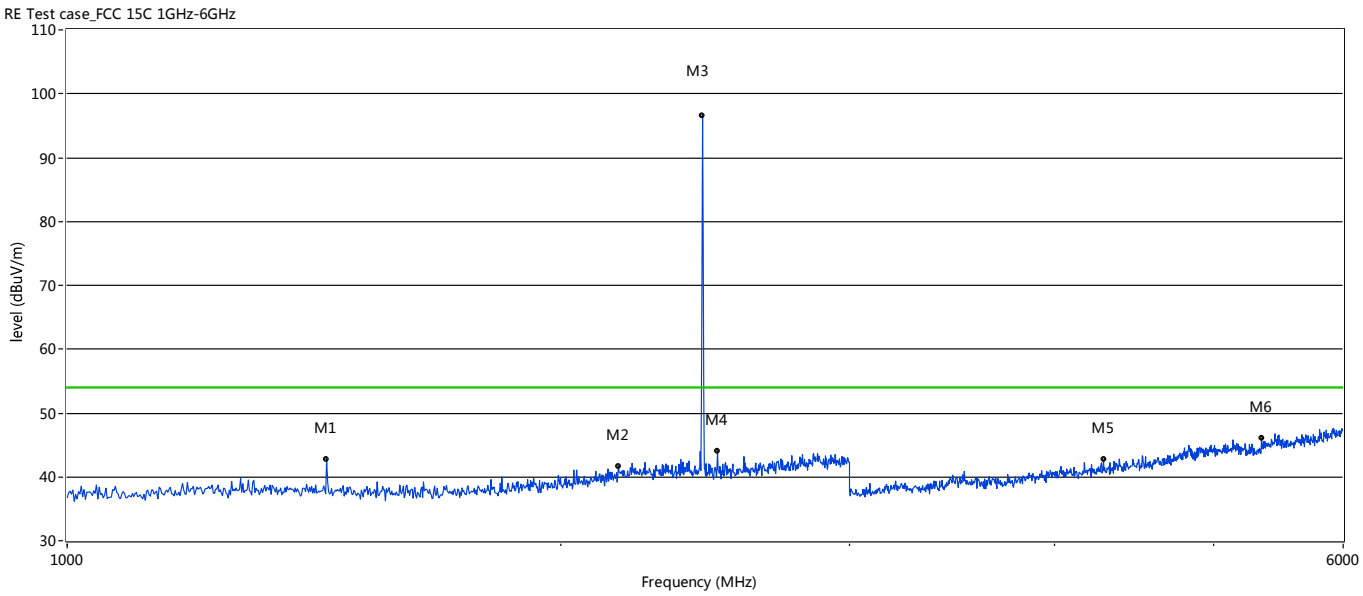
GFSK LOW CHANNEL 6GHz to 25GHz, ANT H



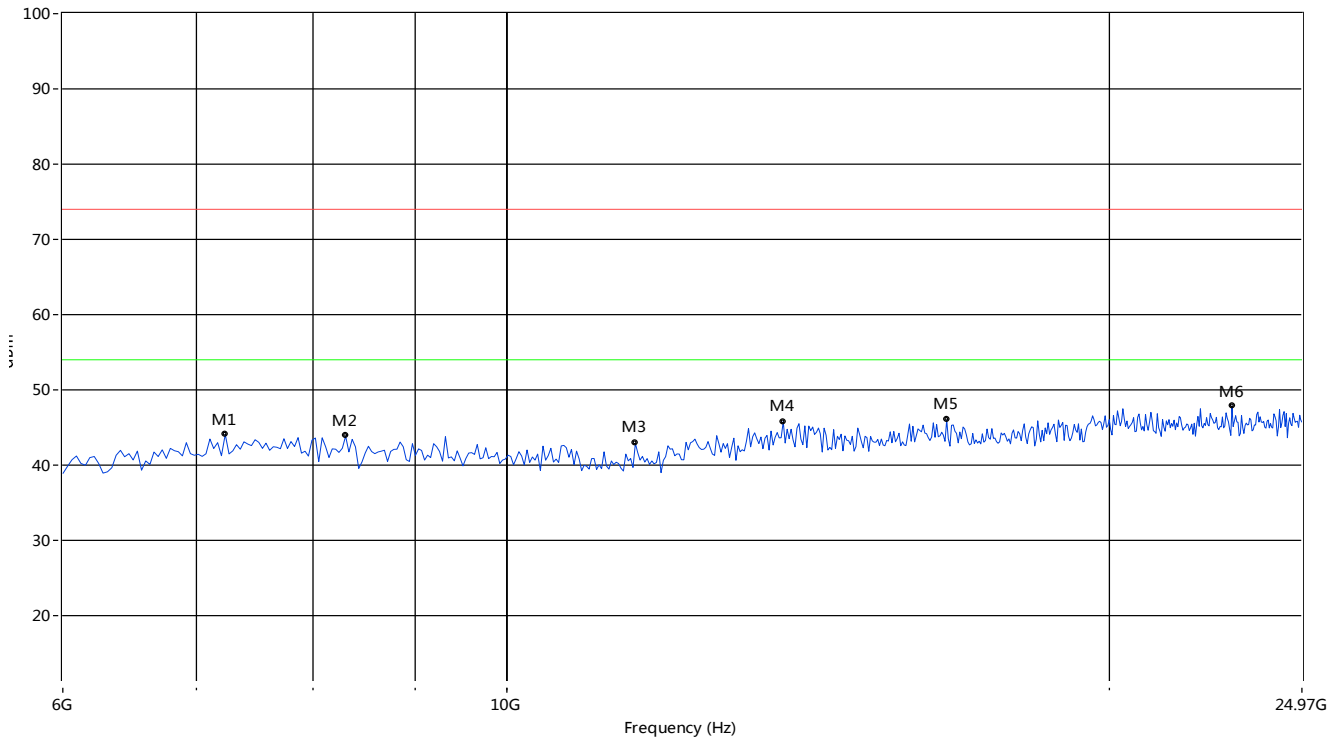
GFSK MID CHANNEL 1GHz to 6GHz, ANT V



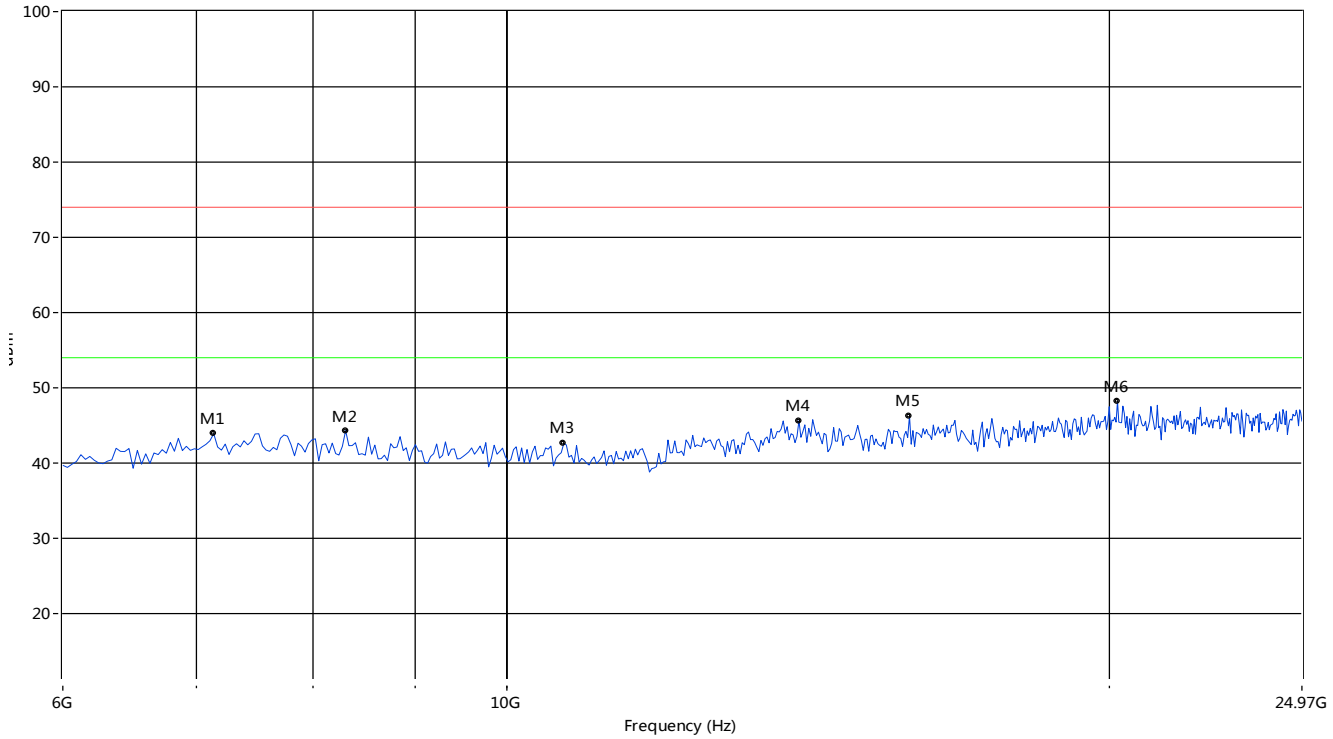
GFSK MID CHANNEL 1GHz to 6GHz, ANT H



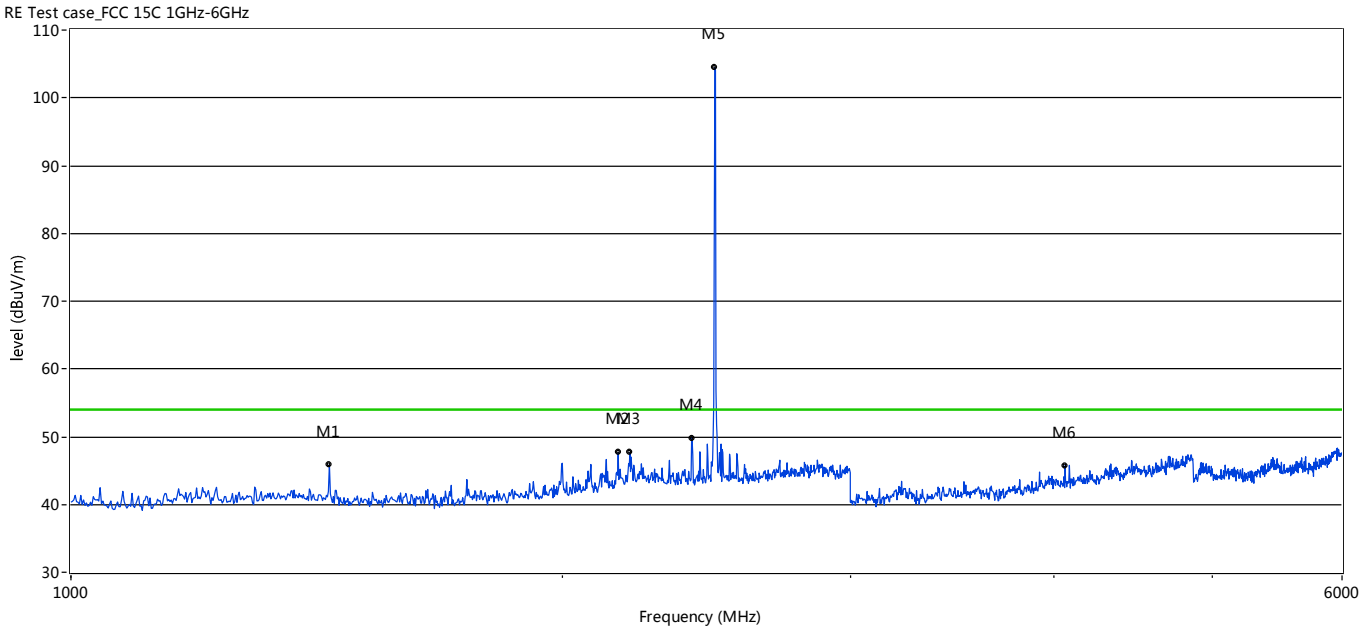
GFSK MID CHANNEL 6GHz to 25GHz, ANT V



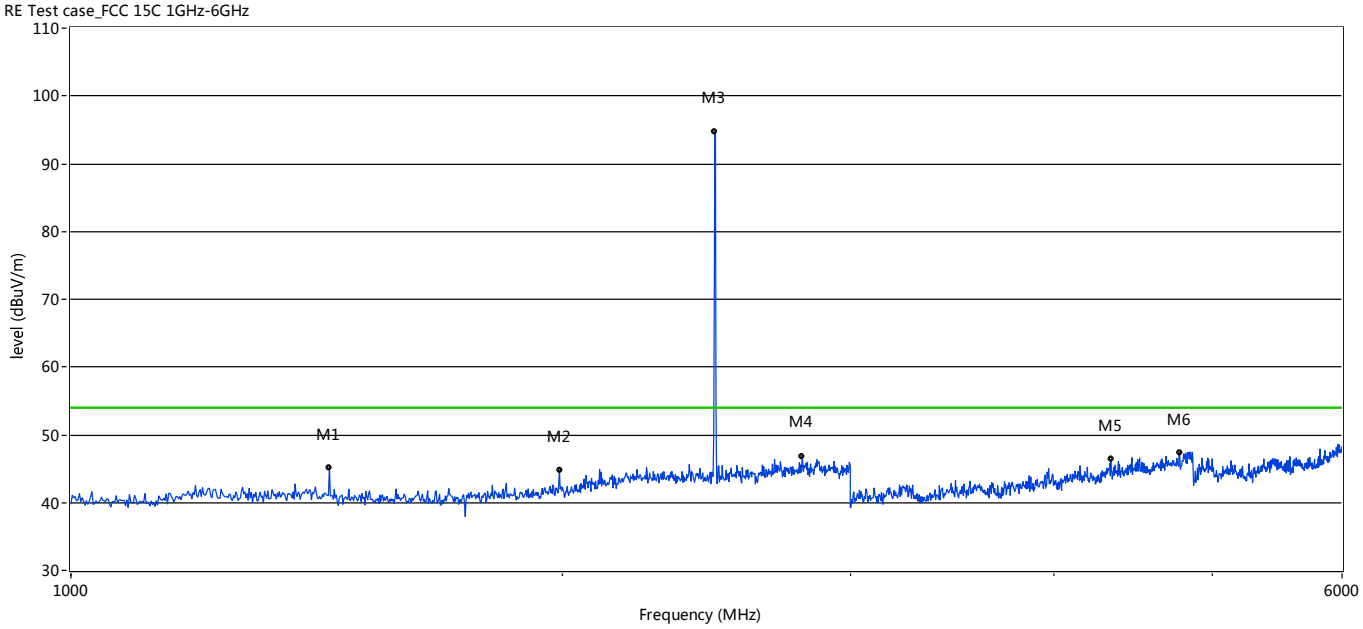
GFSK MID CHANNEL 6GHz to 25GHz, ANT H



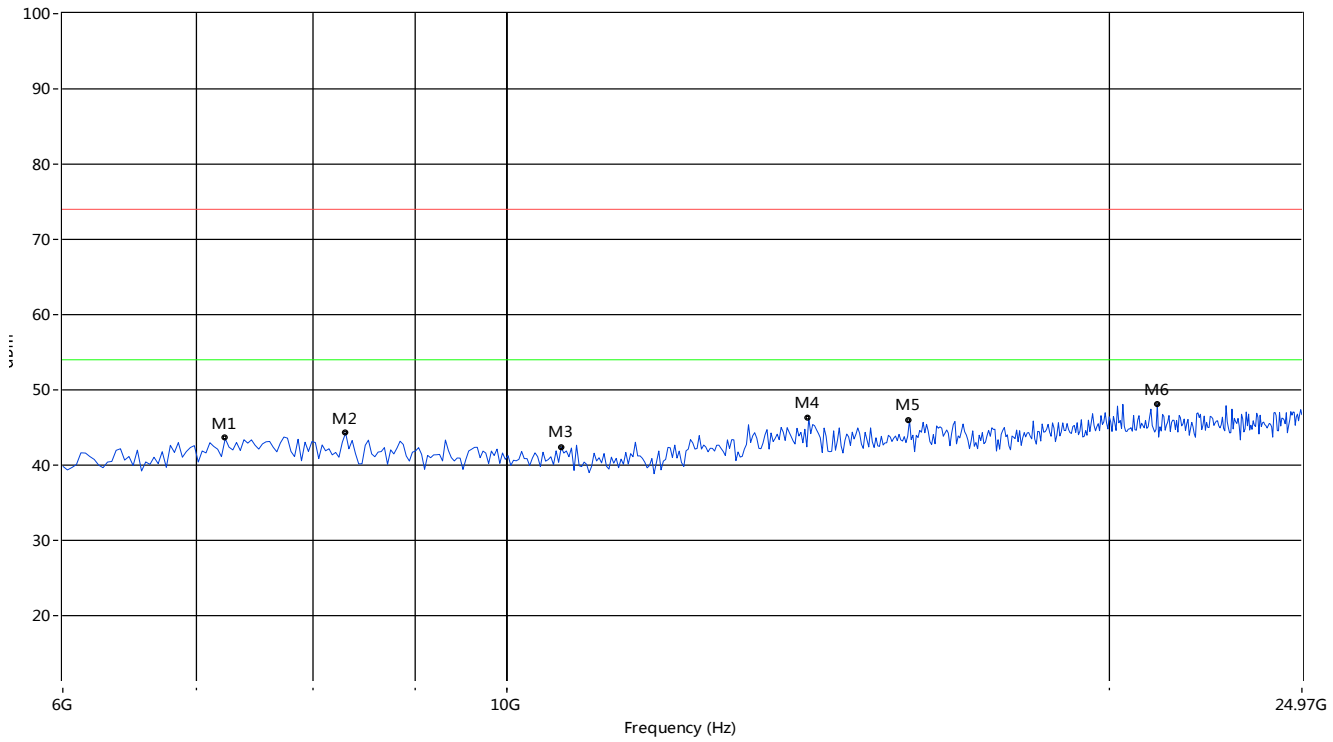
GFSK HIGH CHANNEL 1GHz to 6GHz, ANT V



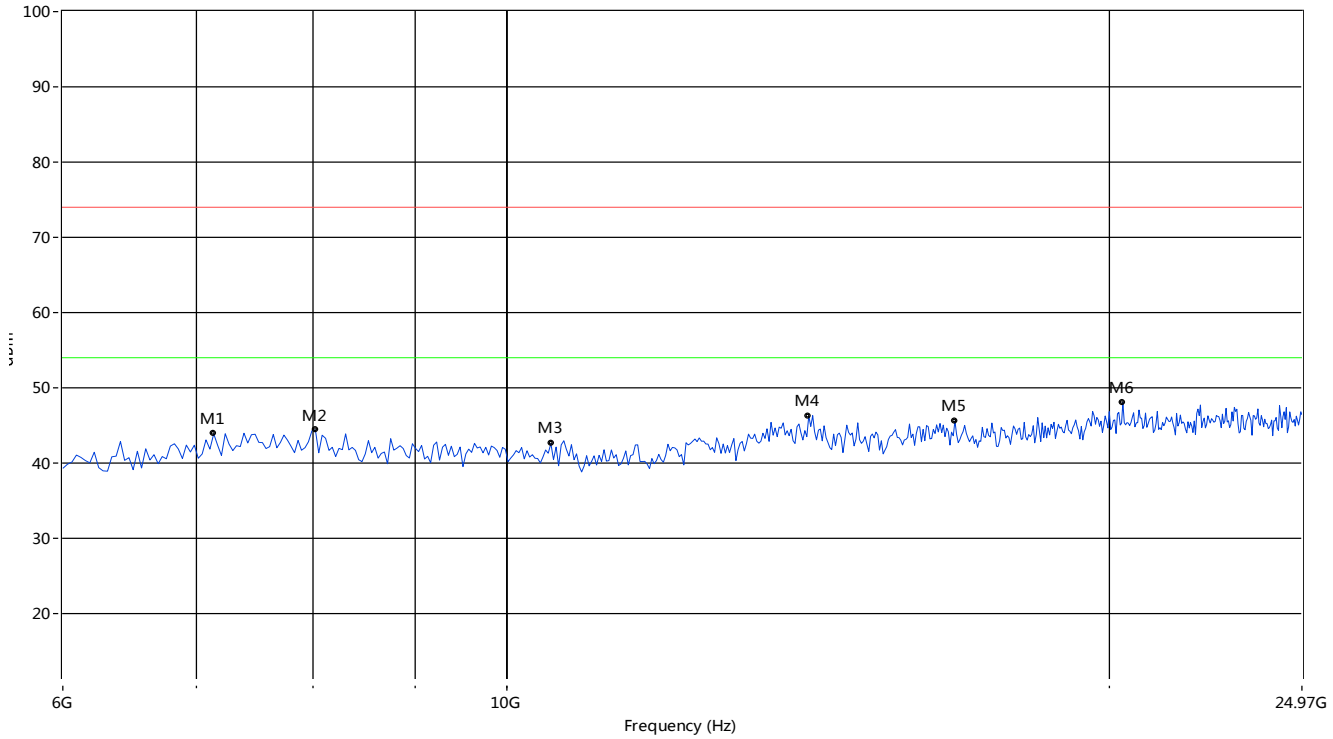
GFSK HIGH CHANNEL 1GHz to 6GHz, ANT H



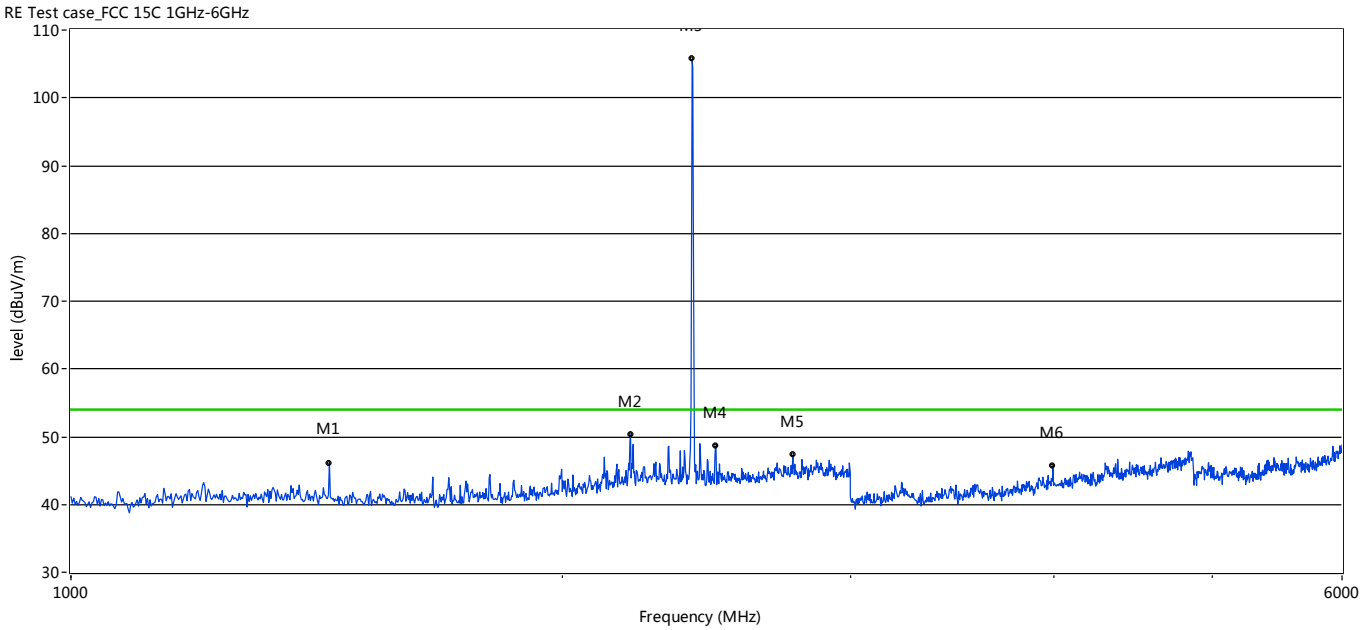
GFSK HIGH CHANNEL 6GHz to 25GHz, ANT V



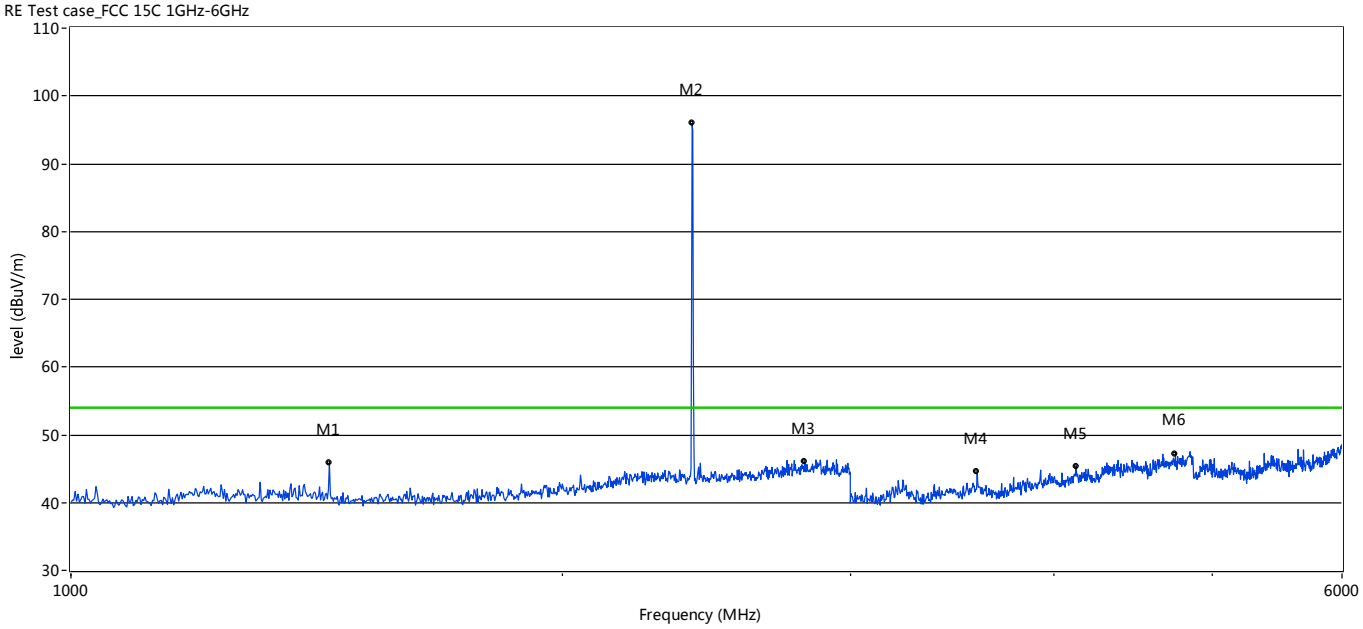
GFSK HIGH CHANNEL 6GHz to 25GHz, ANT H



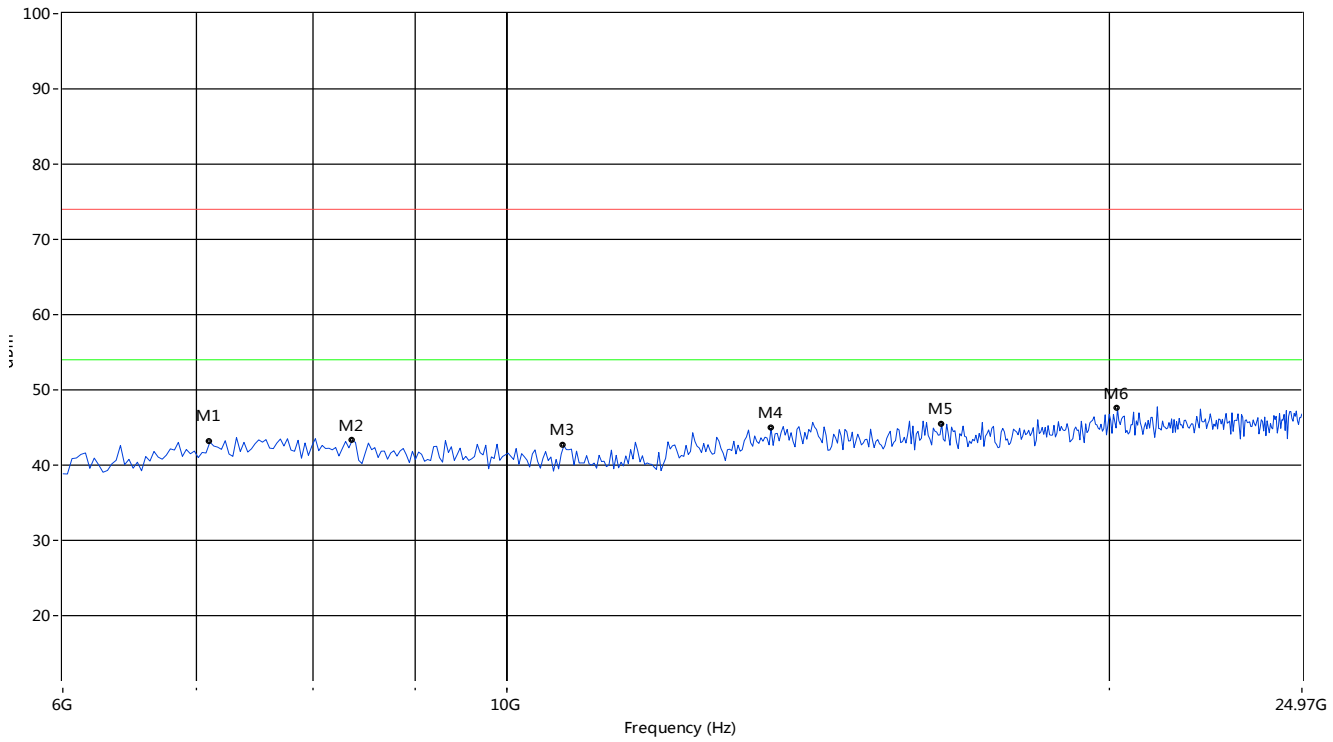
Π/4-DQPSK LOW CHANNEL 1GHz to 6GHz, ANT V



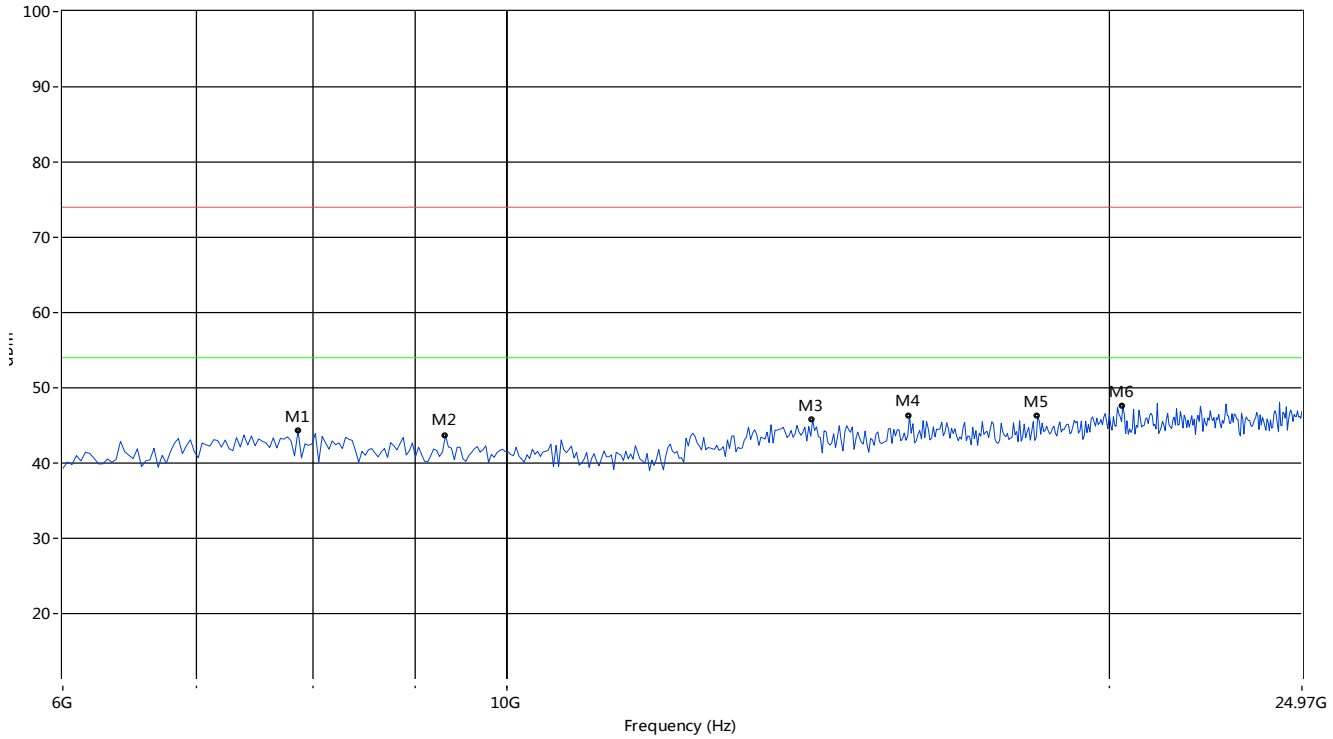
Π/4-DQPSK LOW CHANNEL 1GHz to 6GHz, ANT H



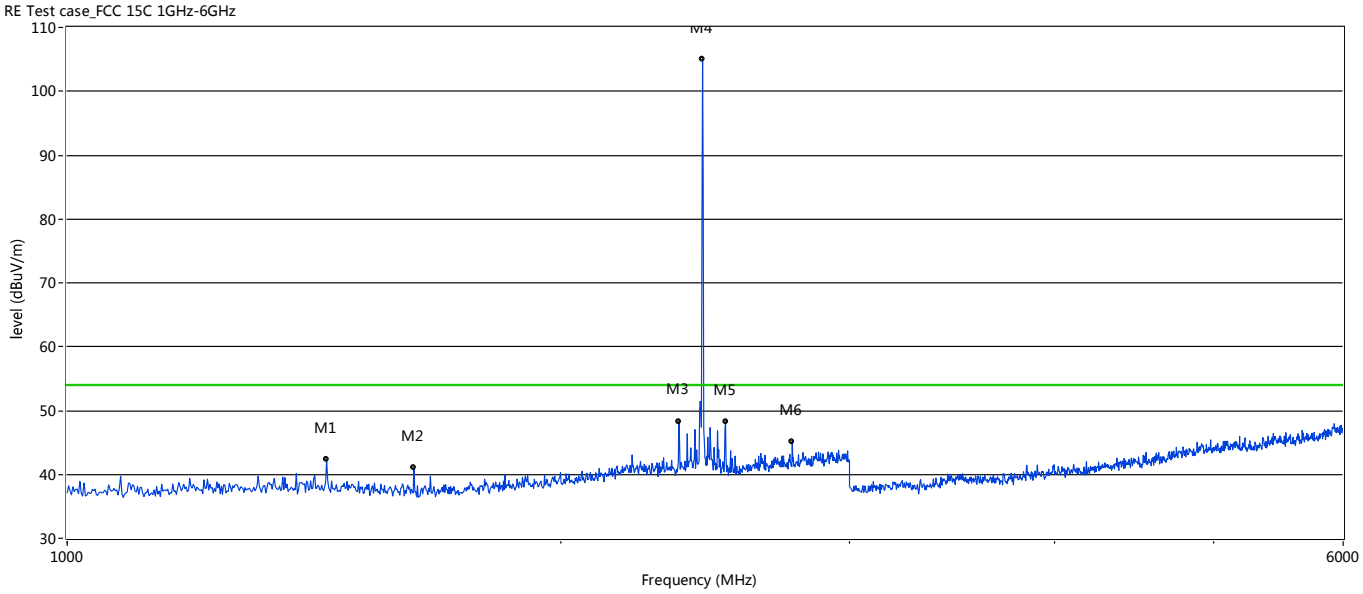
Π/4-DQPSK LOW CHANNEL 6GHz to 25GHz, ANT V



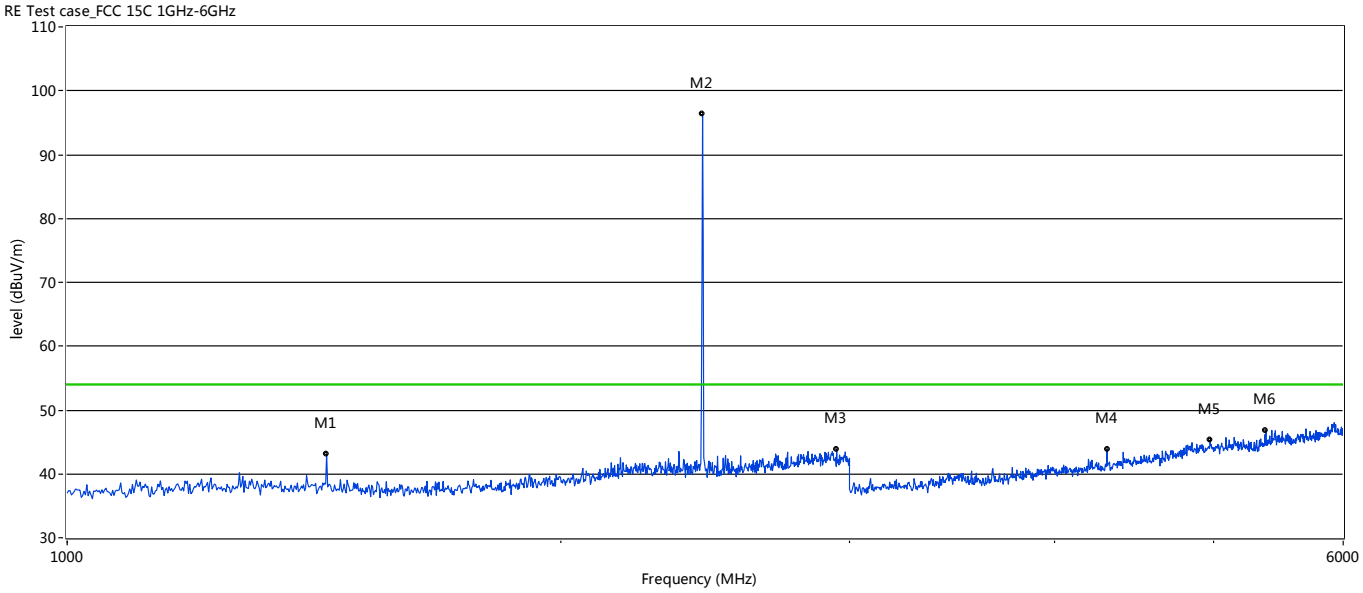
Π/4-DQPSK LOW CHANNEL 6GHz to 25GHz, ANT H



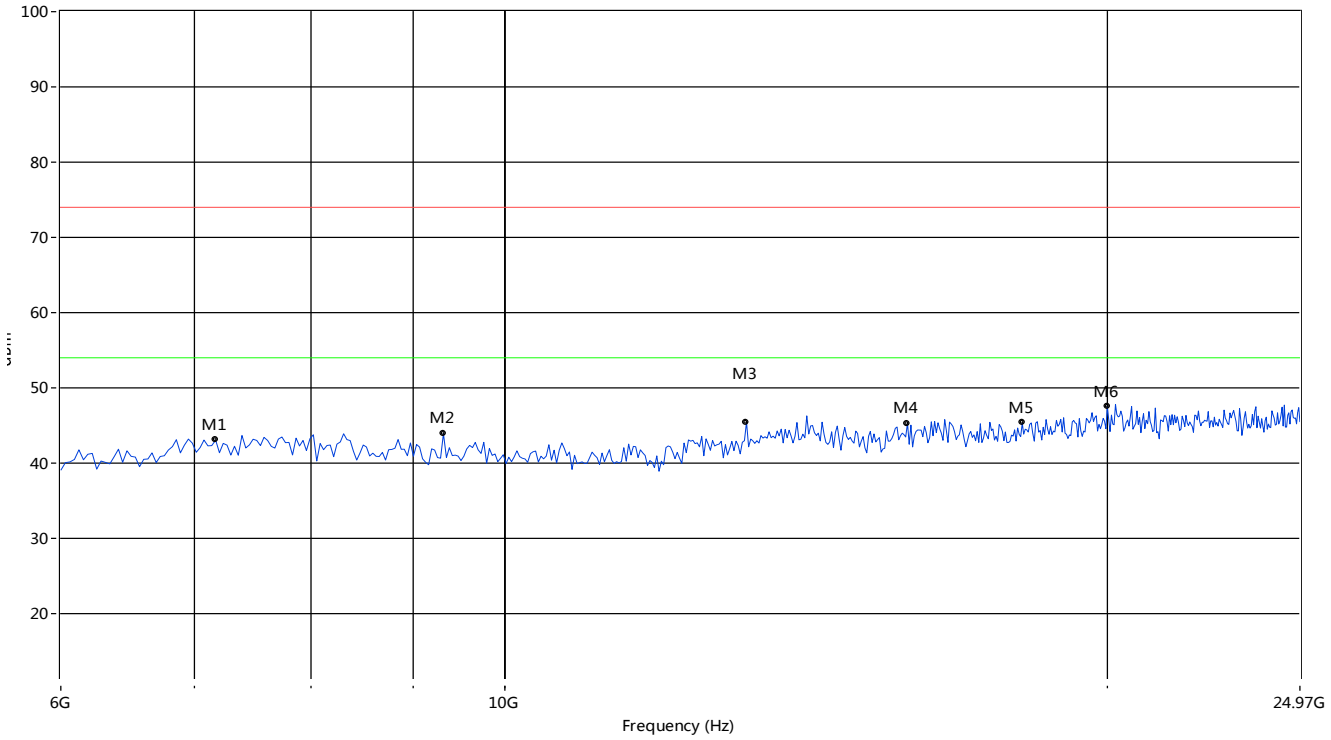
Π/4-DQPSK MID CHANNEL 1GHz to 6GHz, ANT V



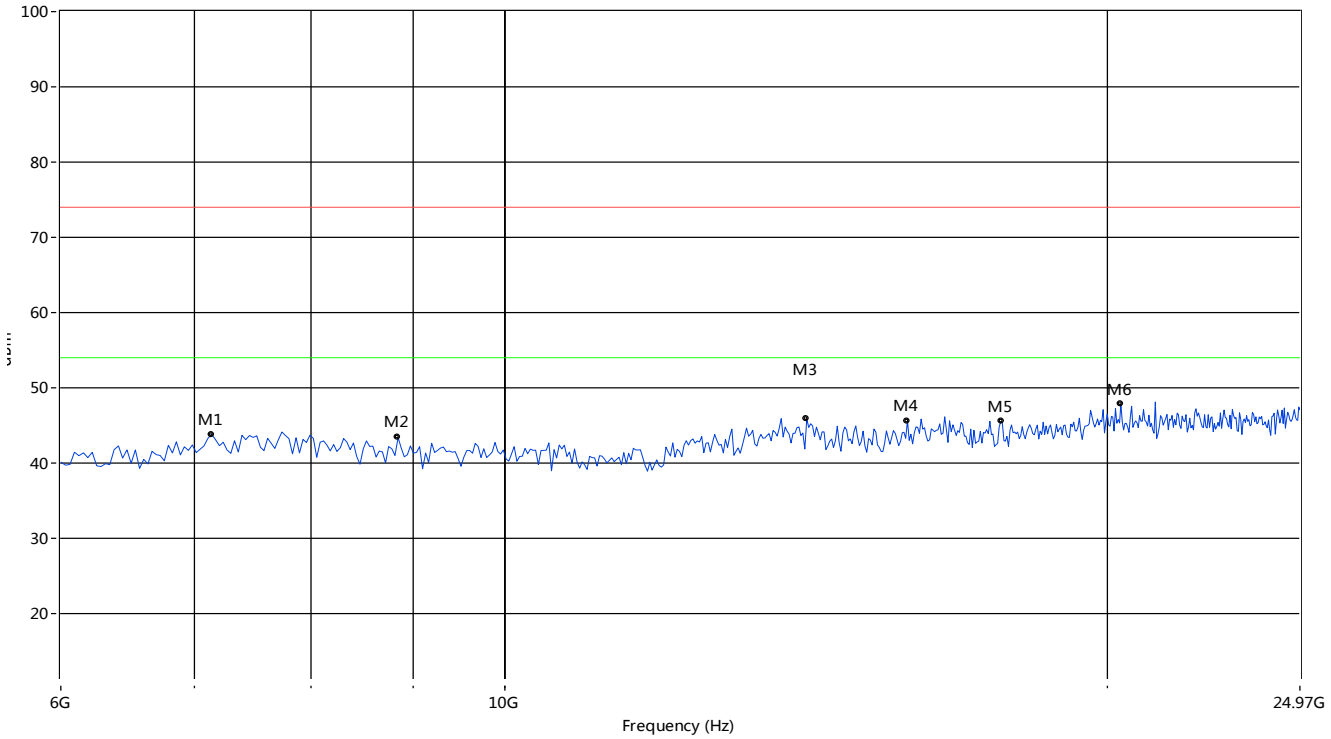
Π/4-DQPSK MID CHANNEL 1GHz to 6GHz, ANT H



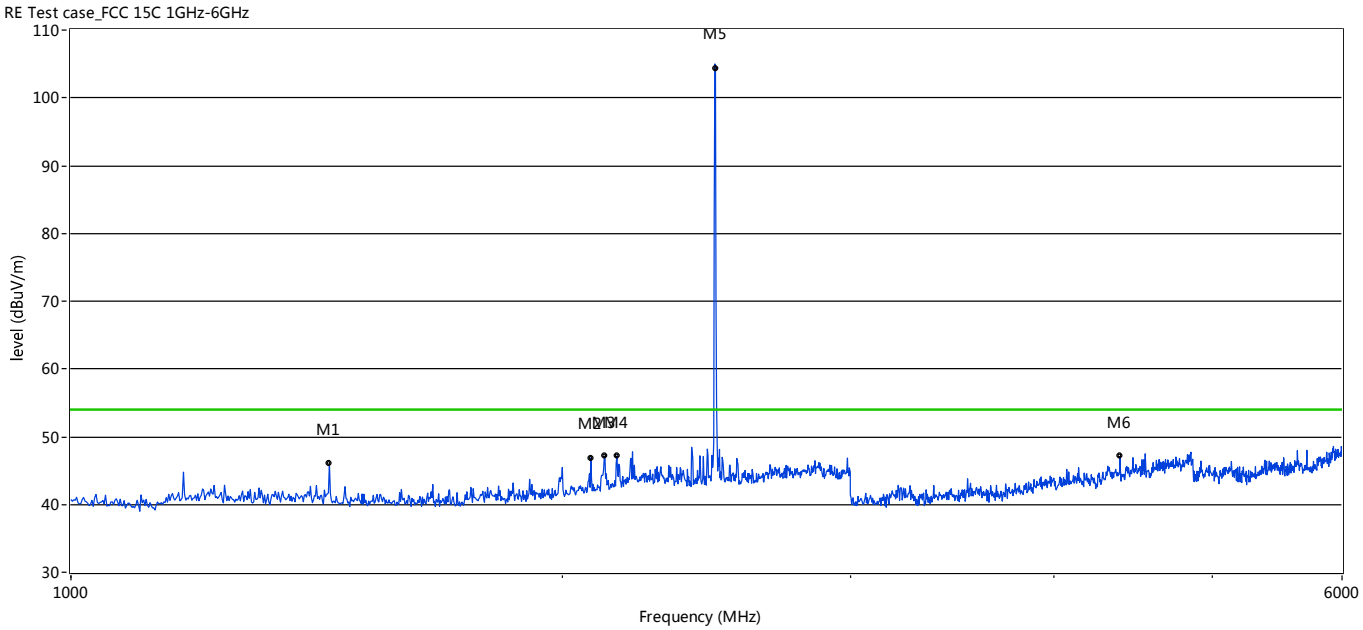
Π/4-DQPSK MID CHANNEL 6GHz to 25GHz, ANT V



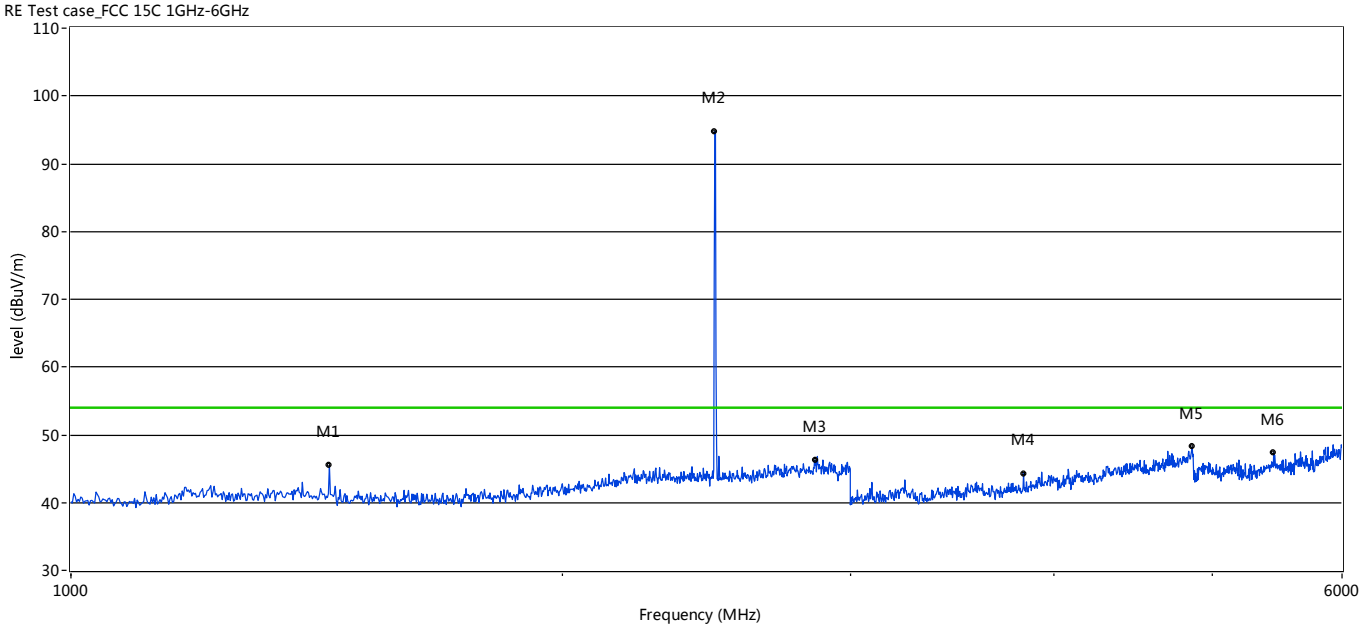
Π/4-DQPSK MID CHANNEL 6GHz to 25GHz, ANT H



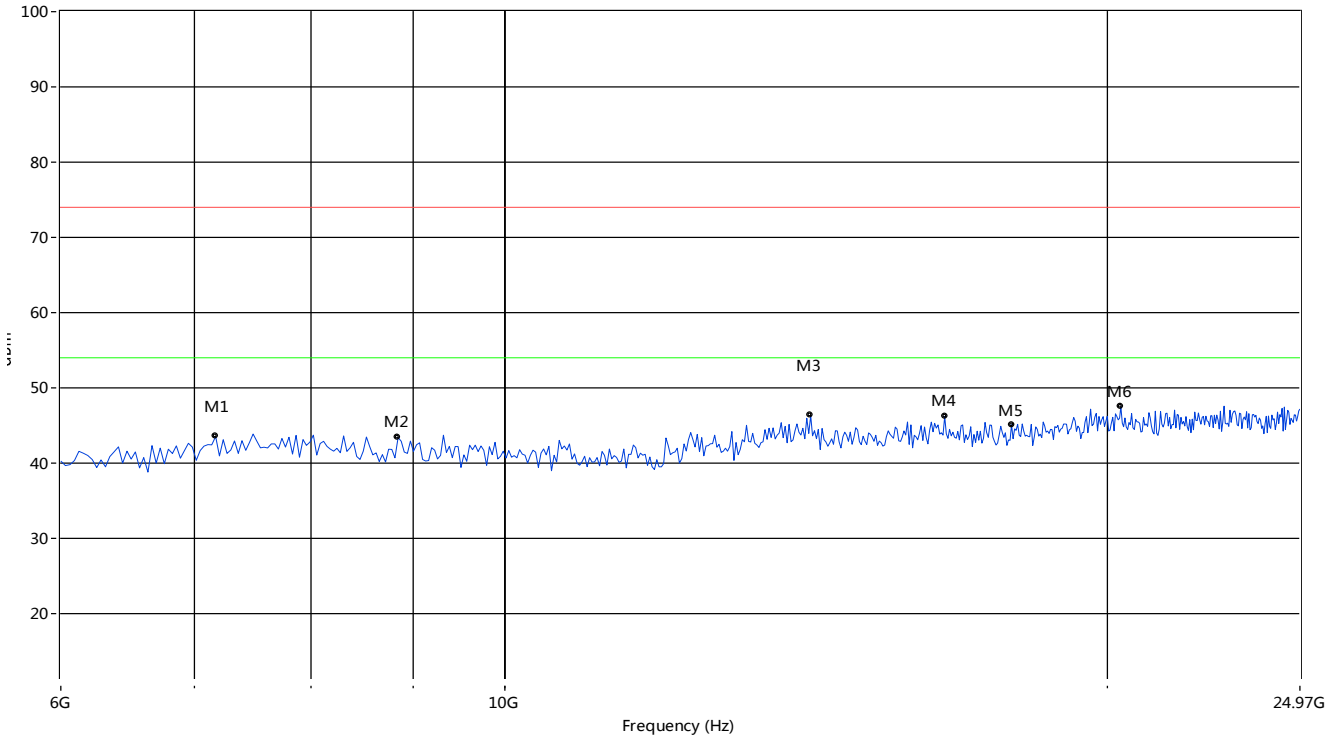
Π/4-DQPSK HIGH CHANNEL 1GHz to 6GHz, ANT V



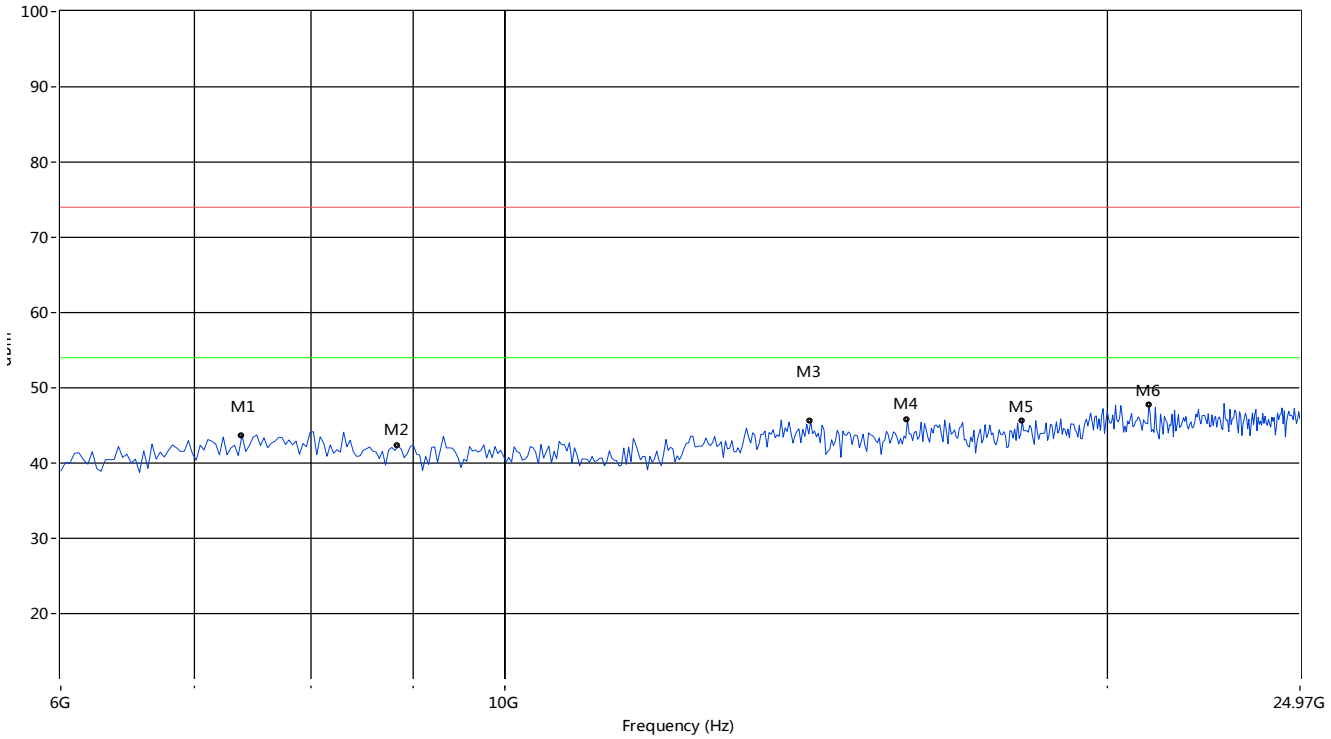
Π/4-DQPSK HIGH CHANNEL 1GHz to 6GHz, ANT H



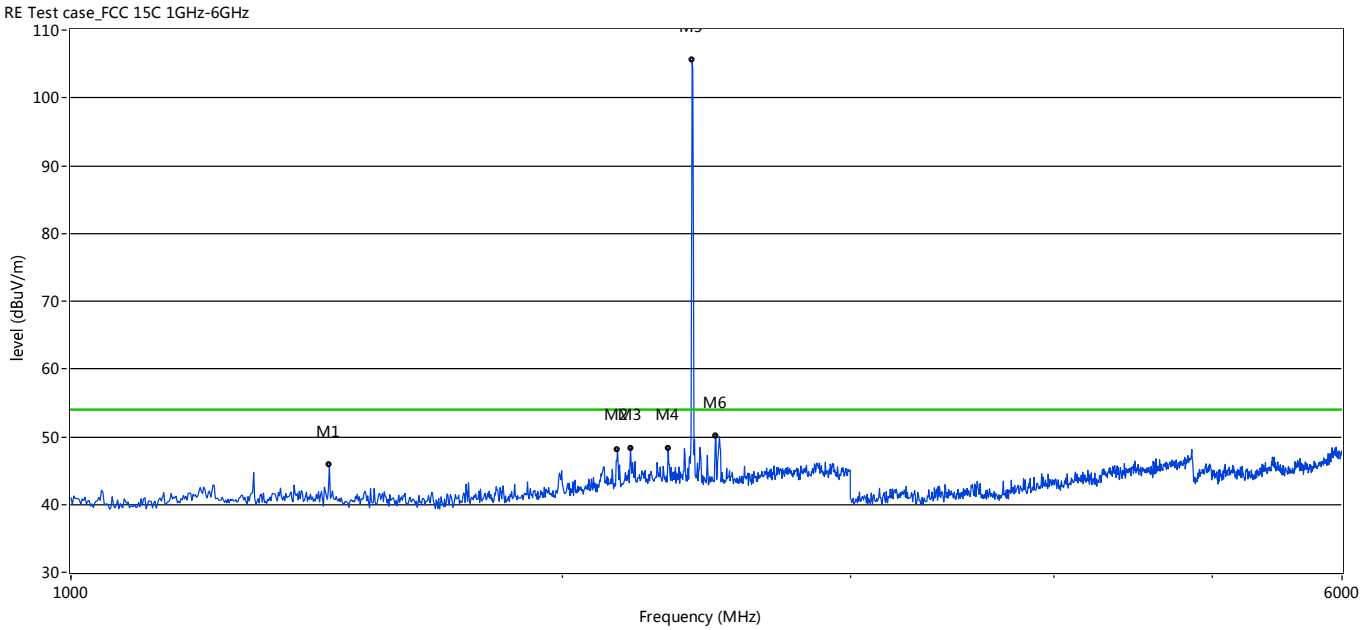
Π/4-DQPSK HIGH CHANNEL 6GHz to 25GHz, ANT V



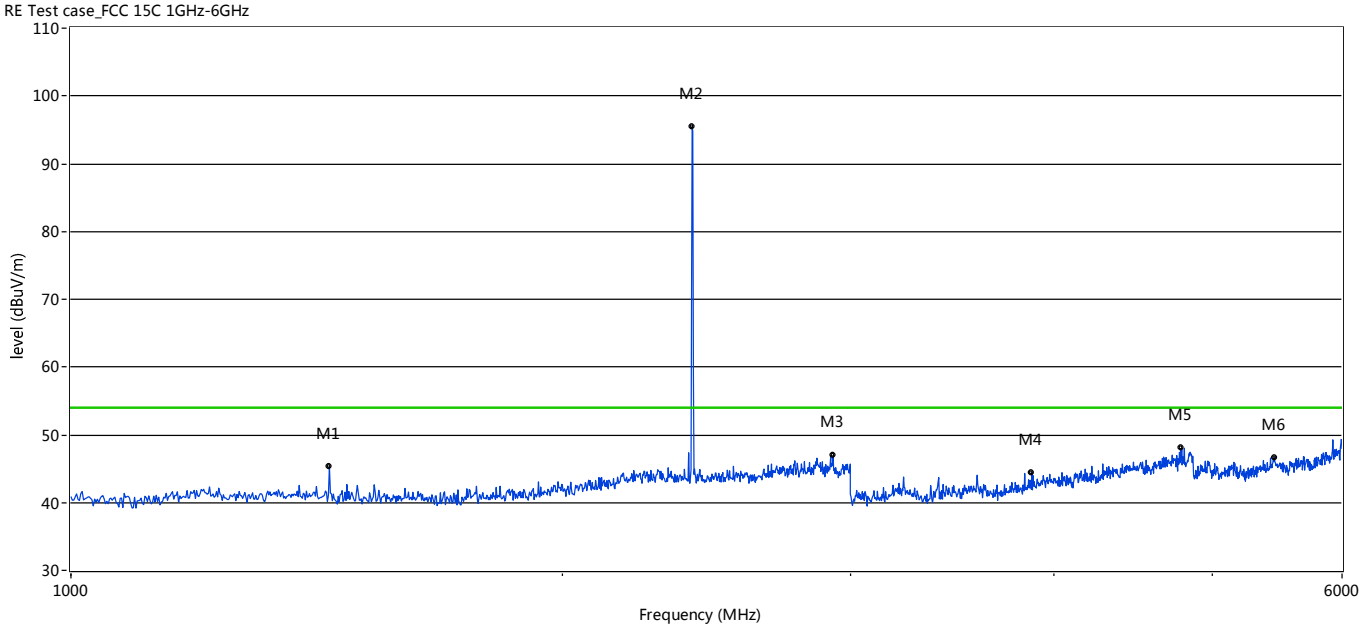
Π/4-DQPSK HIGH CHANNEL 6GHz to 25GHz, ANT H



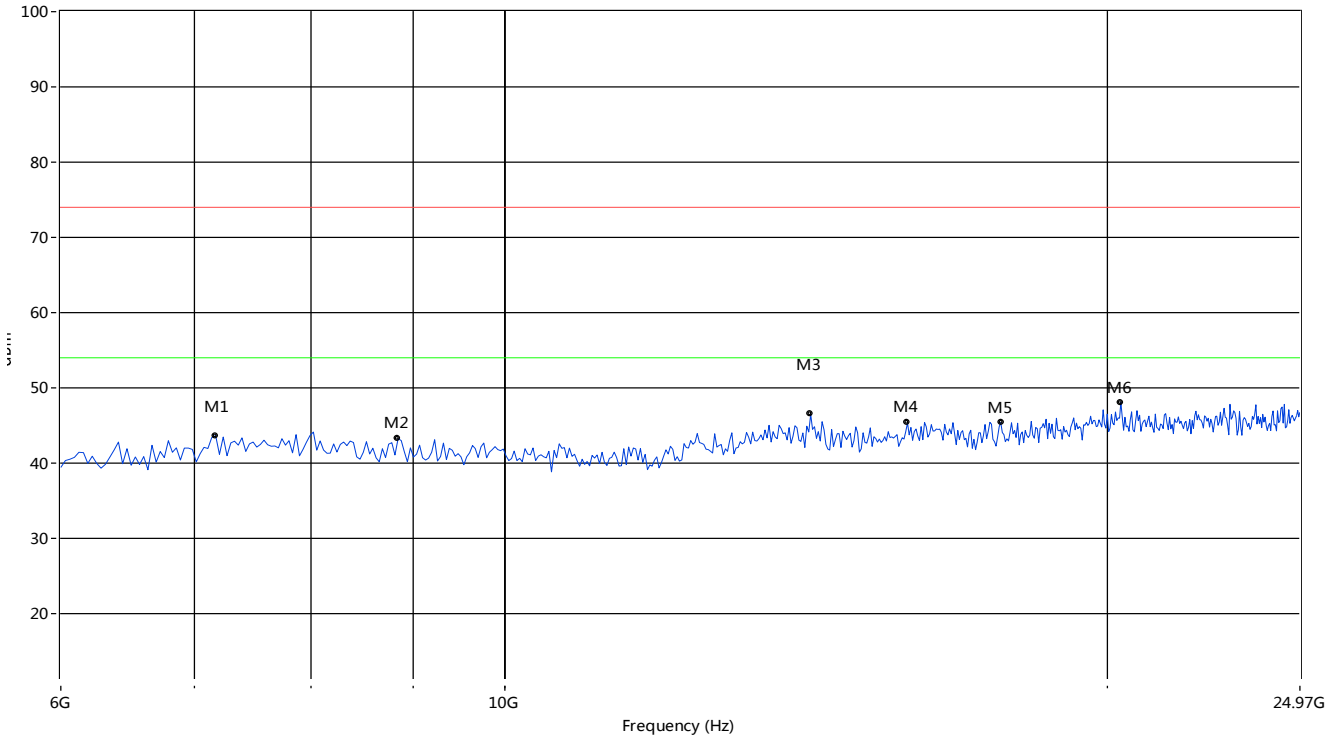
8-DPSK LOW CHANNEL 1GHz to 6GHz, ANT V



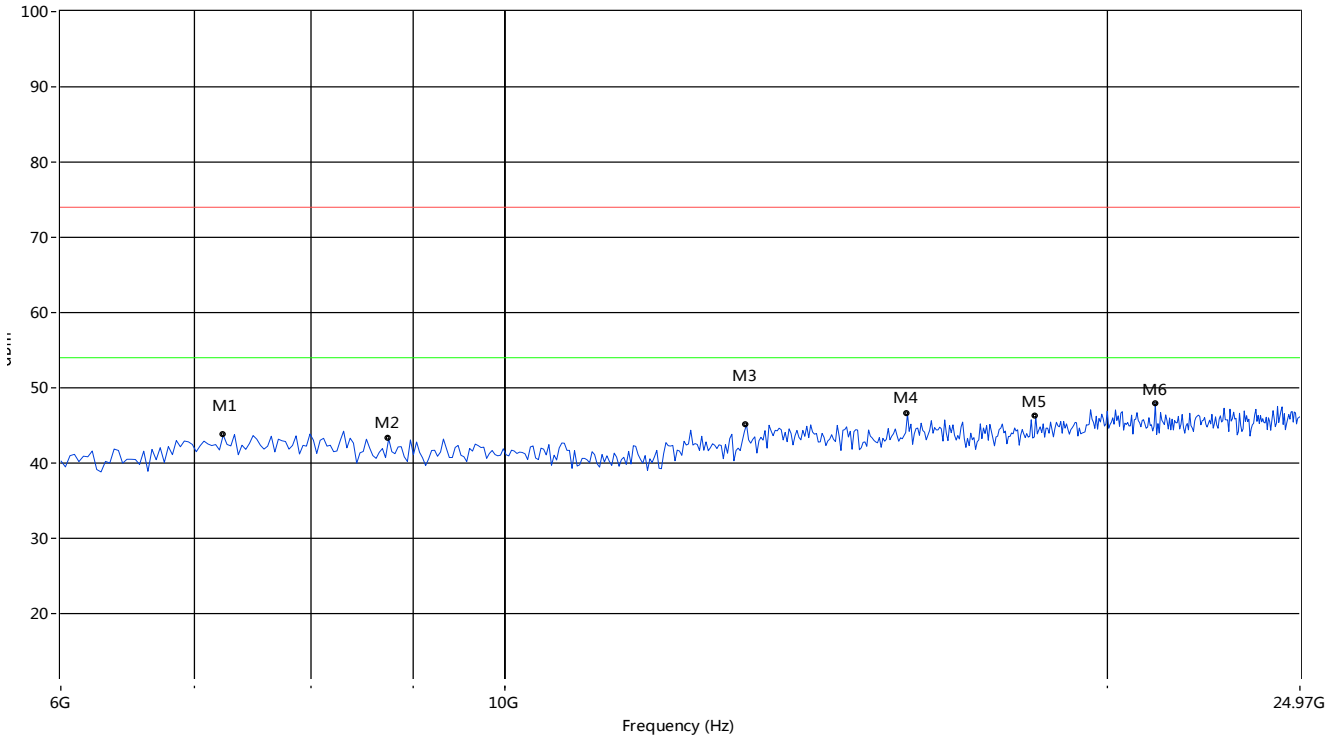
8-DPSK LOW CHANNEL 1GHz to 6GHz, ANT H



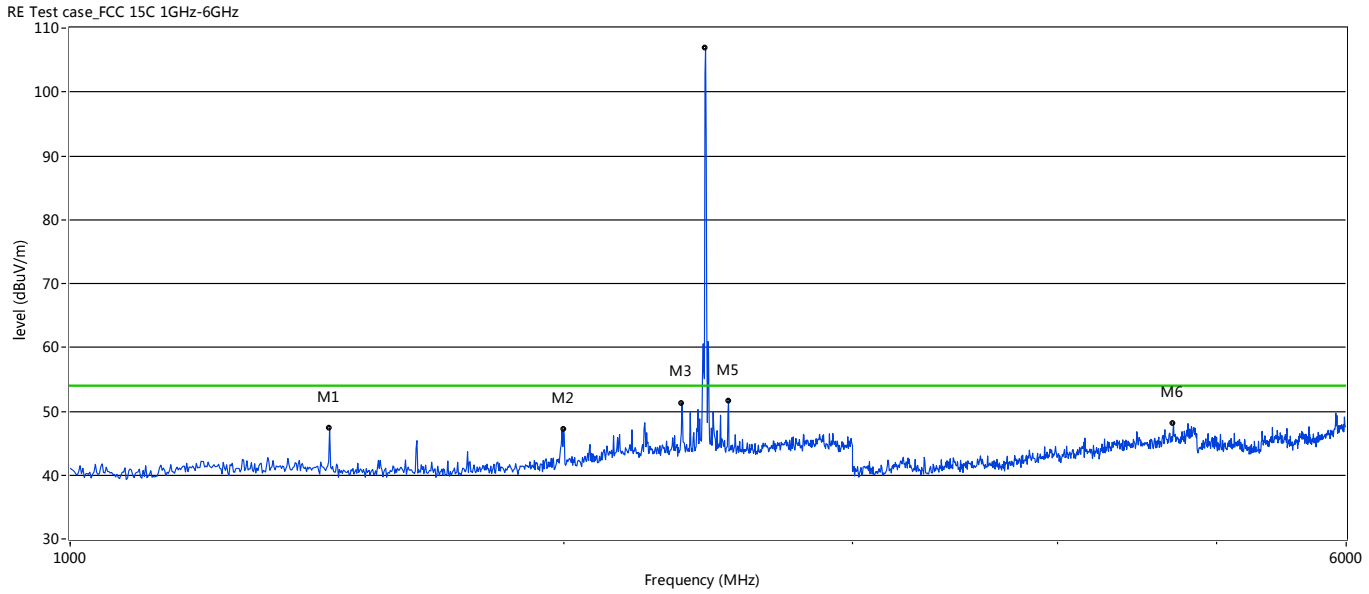
8-DPSK LOW CHANNEL 6GHz to 25GHz, ANT V



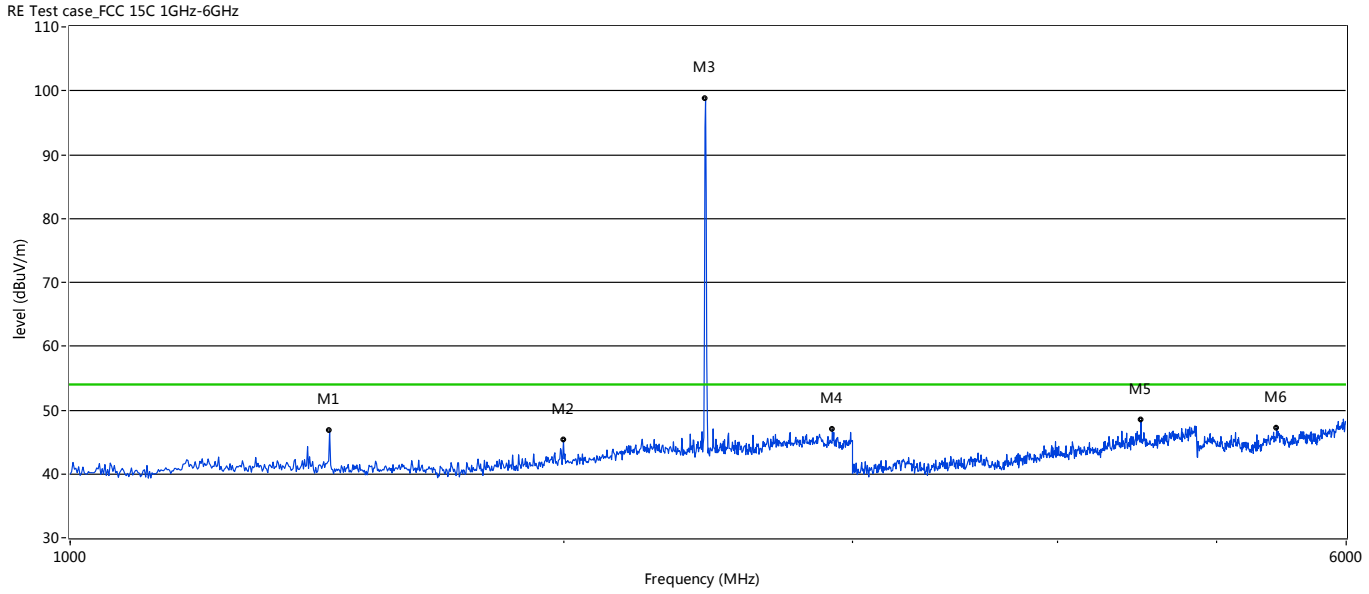
8-DPSK LOW CHANNEL 6GHz to 25GHz, ANT H



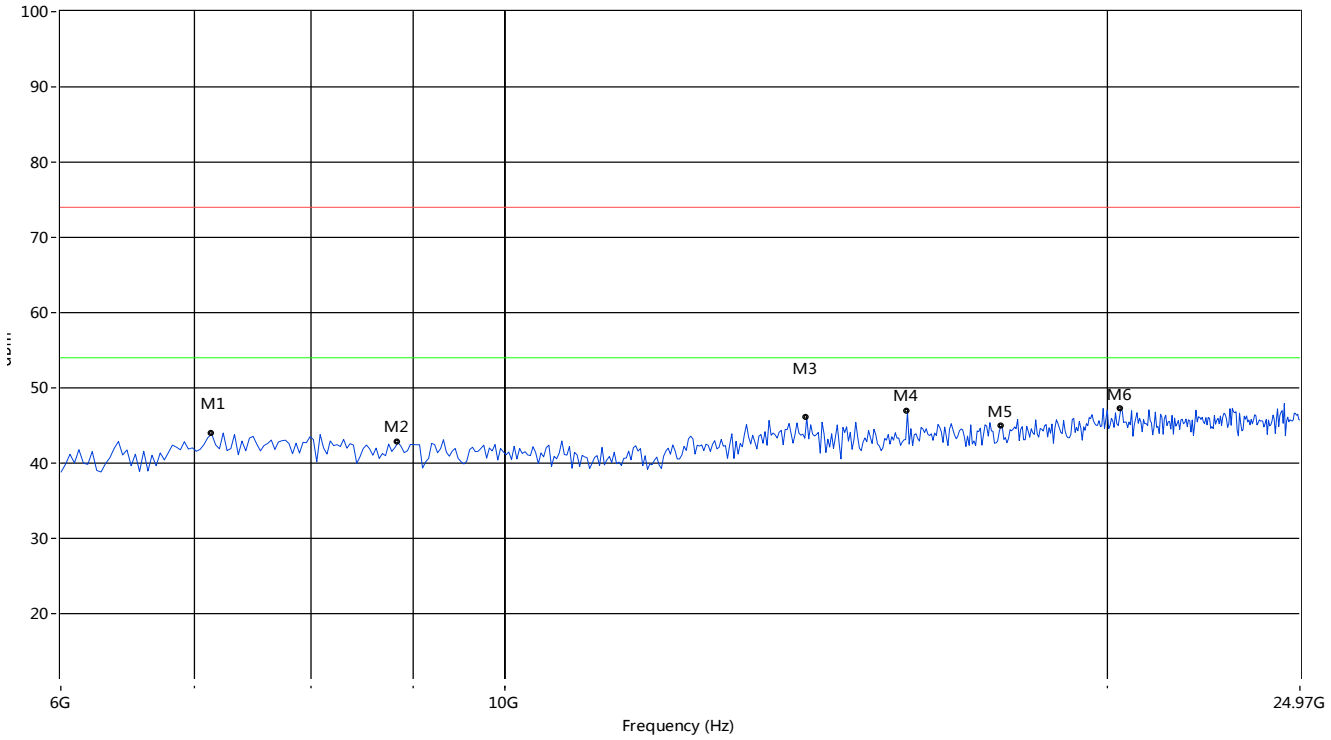
8-DPSK MID CHANNEL 1GHz to 6GHz, ANT V



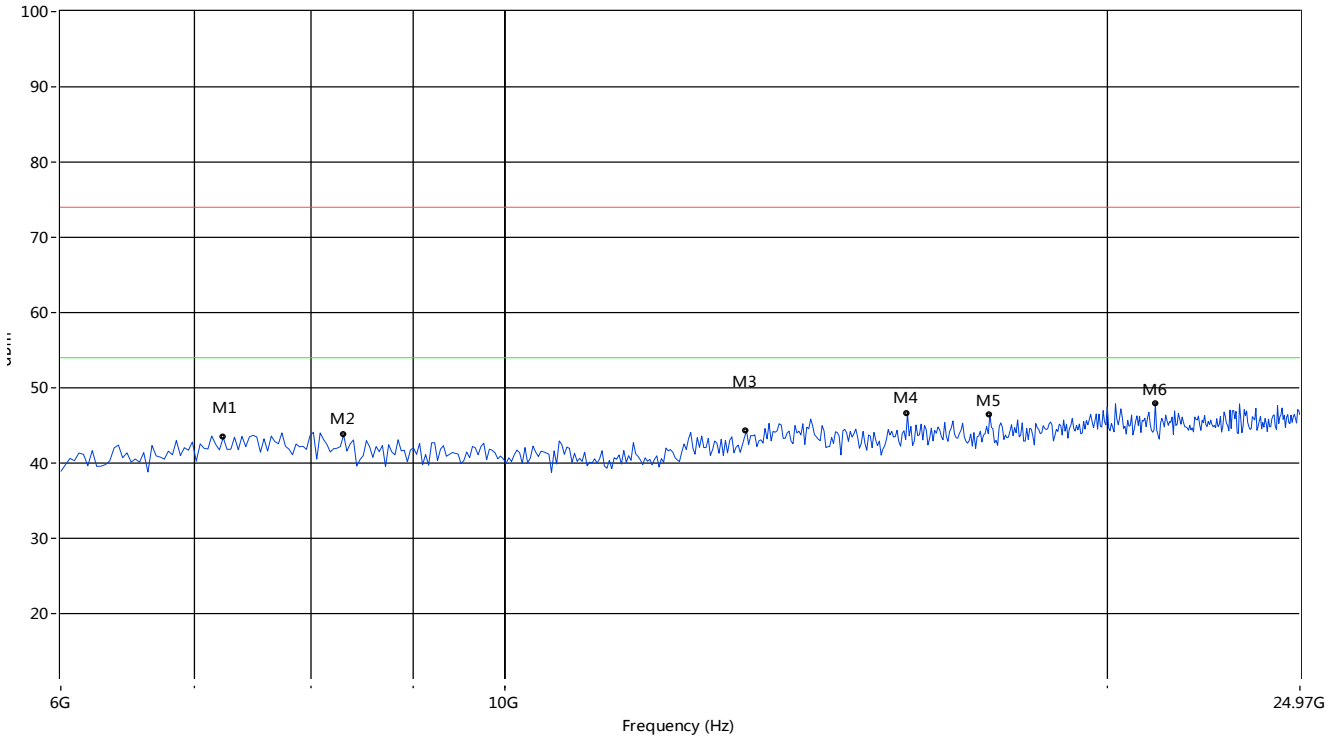
8-DPSK MID CHANNEL 1GHz to 6GHz, ANT H



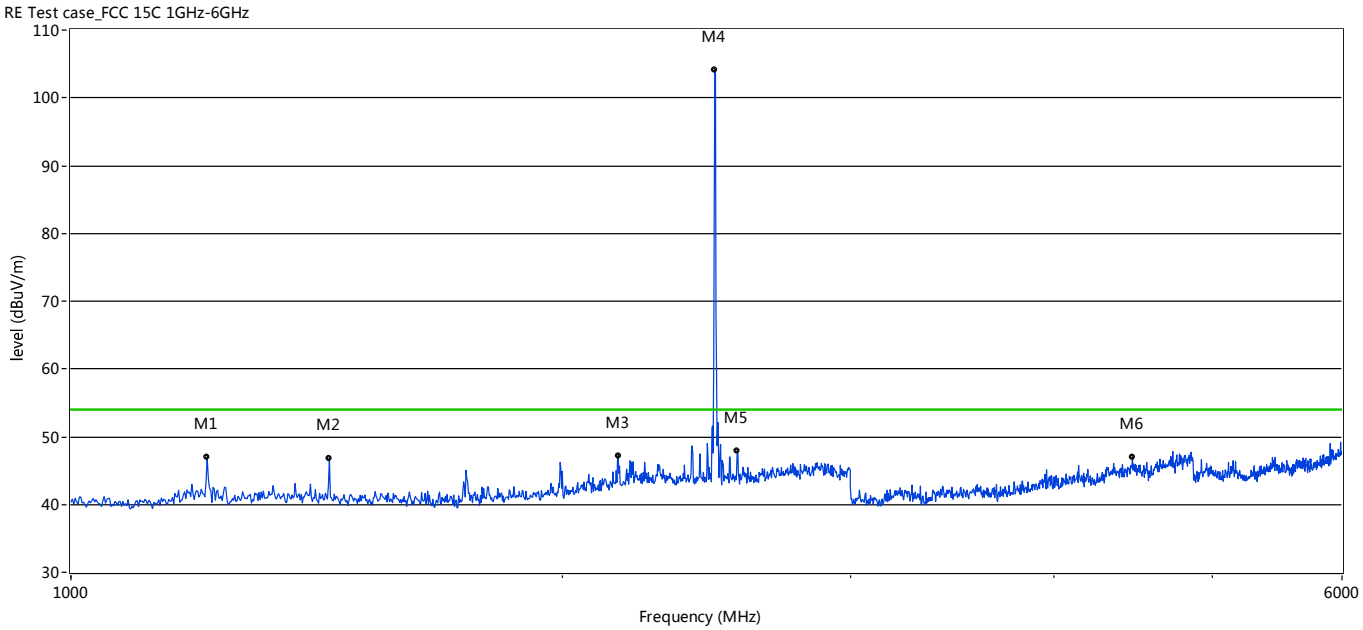
8-DPSK MID CHANNEL 6GHz to 25GHz, ANT V



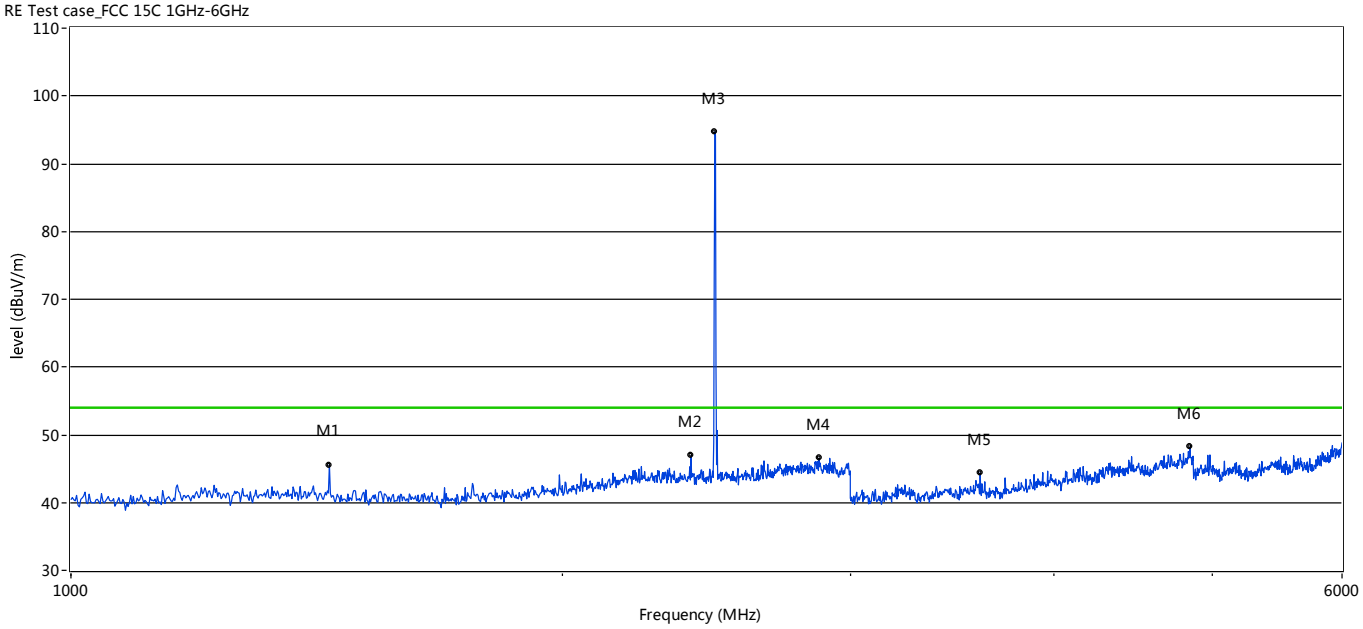
8-DPSK MID CHANNEL 6GHz to 25GHz, ANT H



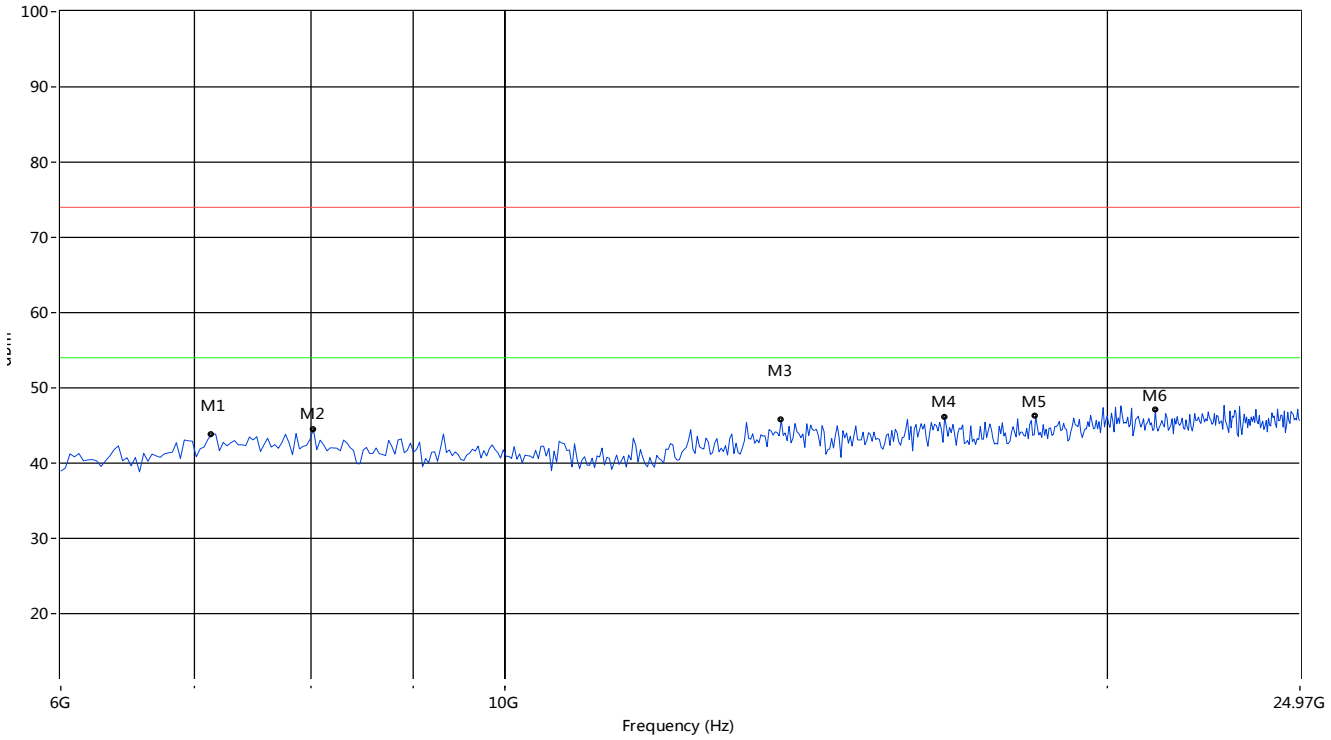
8-DPSK HIGH CHANNEL 1GHz to 6GHz, ANT V



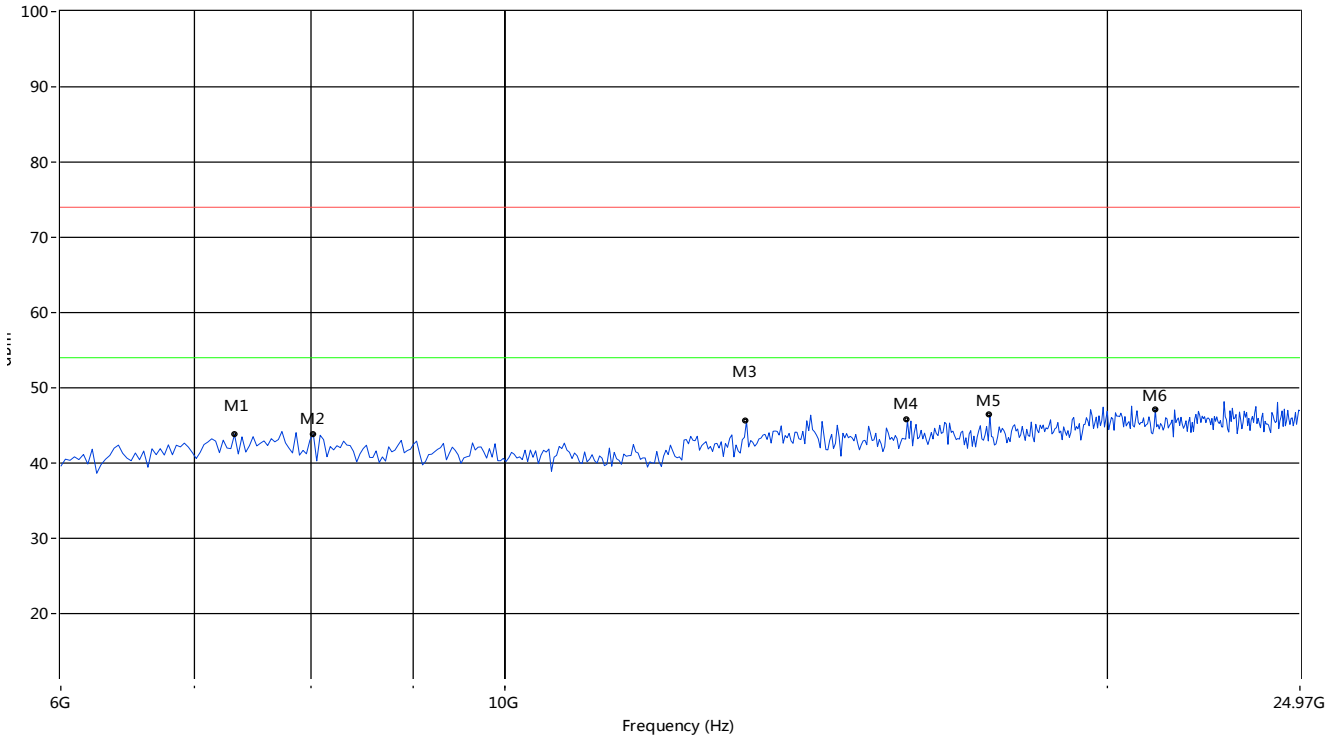
8-DPSK HIGH CHANNEL 1GHz to 6GHz, ANT H



8-DPSK HIGH CHANNEL 6GHz to 25GHz, ANT V



8-DPSK HIGH CHANNEL 6GHz to 25GHz, ANT H



Hopping Mode:

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

Test Data and Plots(1GHz ~ 10th Harmonic)

GFSK Mode:

Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2402.60	104.22	--	114.0	94.0	88.00	Vertical	Pass
Harmonic and Spurious	1439.56	47.16	--	74.0	54.0	67.20	Vertical	Pass
	2360.64	50.17	--	74.0	54.0	81.30	Vertical	Pass
	2988.01	46.23	--	74.0	54.0	67.20	Vertical	Pass
	4843.16	48.32	--	74.0	54.0	-0.00	Vertical	Pass
	7138.10	43.56	--	74.0	54.0	96	Vertical	Pass
	9319.47	43.77	--	74.0	54.0	70	Vertical	Pass
	14219.63	46.43	--	74.0	54.0	244	Vertical	Pass
	15895.17	46.37	--	74.0	54.0	96	Vertical	Pass
	17286.19	45.69	--	74.0	54.0	55	Vertical	Pass
	21143.09	47.65	--	74.0	54.0	240	Vertical	Pass
Fundamental	2404.60	96.18	--	114.0	94.0	143.80	Horizontal	Pass
Harmonic and Spurious	1439.56	47.19	--	74.0	54.0	5.90	Horizontal	Pass
	2130.87	44.25	--	74.0	54.0	325.10	Horizontal	Pass
	2982.02	45.95	--	74.0	54.0	220.00	Horizontal	Pass
	4834.17	48.58	--	74.0	54.0	7.50	Horizontal	Pass
	6853.58	42.53	--	74.0	54.0	328	Horizontal	Pass
	7738.77	43.25	--	74.0	54.0	6	Horizontal	Pass
	11595.67	42.52	--	74.0	54.0	272	Horizontal	Pass
	14219.63	46.08	--	74.0	54.0	154	Horizontal	Pass
	17475.87	45.91	--	74.0	54.0	91	Horizontal	Pass
	22217.97	47.78	--	74.0	54.0	151	Horizontal	Pass

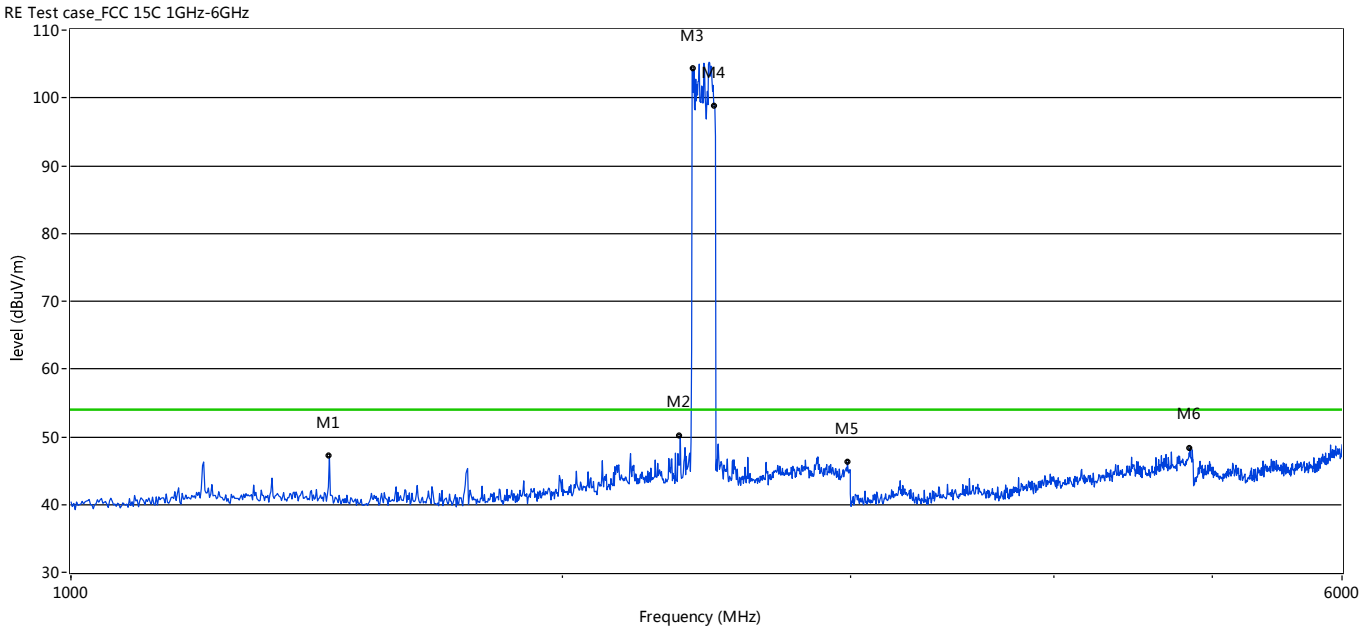
Ⅱ/4-DQPSK Mode:

Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2406.59	104.58	--	114.0	94.0	82.00	Vertical	Pass
Harmonic and Spurious	1439.56	46.92	--	74.0	54.0	109.50	Vertical	Pass
	2158.84	48.64	--	74.0	54.0	137.30	Vertical	Pass
	2848.15	47.10	--	74.0	54.0	206.40	Vertical	Pass
	4843.16	48.69	--	74.0	54.0	173.70	Vertical	Pass
	7138.10	43.43	--	74.0	54.0	239	Vertical	Pass
	7865.22	44.07	--	74.0	54.0	63	Vertical	Pass
	11627.29	42.82	--	74.0	54.0	221	Vertical	Pass
	14219.63	46.46	--	74.0	54.0	234	Vertical	Pass
	17475.87	46.52	--	74.0	54.0	61	Vertical	Pass
	20321.13	47.80	--	74.0	54.0	305	Vertical	Pass
Fundamental	2476.52	96.40	--	114.0	94.0	129.70	Horizontal	Pass
Harmonic and Spurious	1439.56	47.79	--	74.0	54.0	283.40	Horizontal	Pass
	1747.25	44.75	--	74.0	54.0	39.10	Horizontal	Pass
	2856.14	46.22	--	74.0	54.0	346.00	Horizontal	Pass
	4825.17	47.78	--	74.0	54.0	32.00	Horizontal	Pass
	7138.10	43.56	--	74.0	54.0	163	Horizontal	Pass
	8023.29	44.28	--	74.0	54.0	345	Horizontal	Pass
	13492.51	44.91	--	74.0	54.0	153	Horizontal	Pass
	14219.63	46.43	--	74.0	54.0	22	Horizontal	Pass
	17286.19	45.69	--	74.0	54.0	178	Horizontal	Pass
	21143.09	47.65	--	74.0	54.0	28	Horizontal	Pass

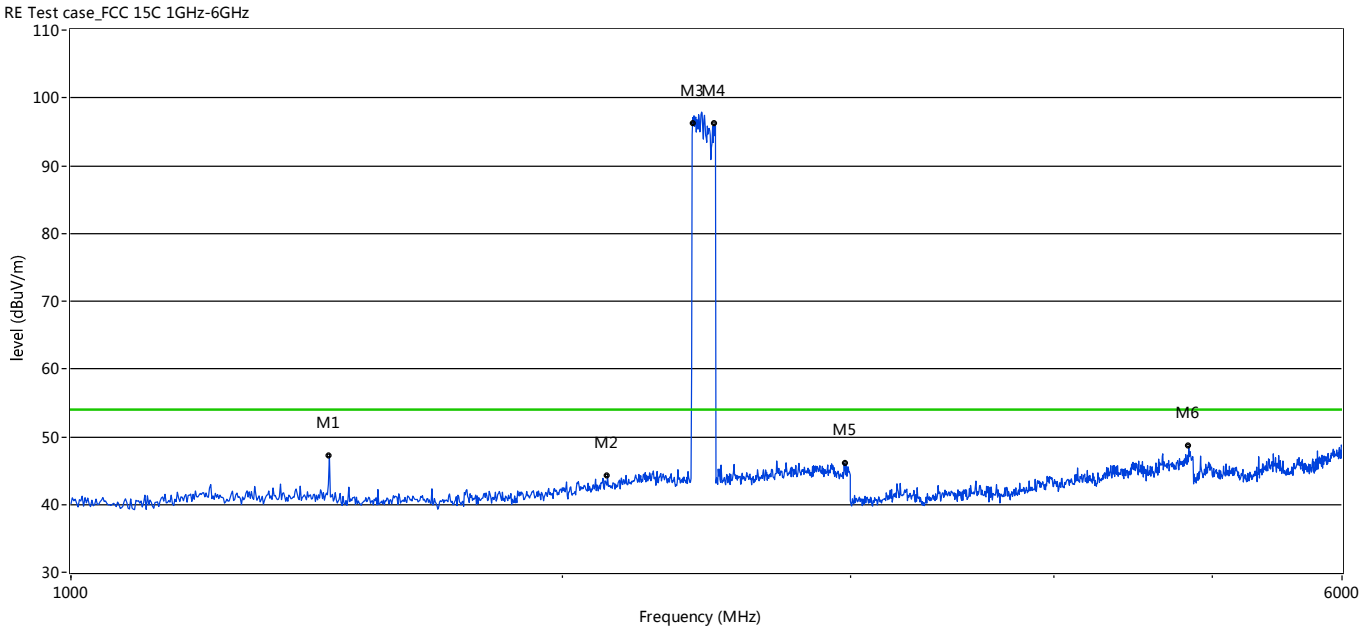
8-DPSK Mode:

Fre. (MHz)		Pk (dBuV/m)	AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Degree (°)	Antenna	Verdict
Fundamental	2402.60	105.23	--	114.0	94.0	83.50	Vertical	Pass
Harmonic and Spurious	1439.56	47.02	--	74.0	54.0	118.00	Vertical	Pass
	2160.84	48.52	--	74.0	54.0	145.00	Vertical	Pass
	2908.09	46.80	--	74.0	54.0	7.40	Vertical	Pass
	4834.17	47.97	--	74.0	54.0	168.80	Vertical	Pass
	6853.58	42.81	--	74.0	54.0	219	Vertical	Pass
	8023.29	43.88	--	74.0	54.0	64	Vertical	Pass
	11595.67	43.21	--	74.0	54.0	173	Vertical	Pass
	14219.63	46.14	--	74.0	54.0	334	Vertical	Pass
	15895.17	46.25	--	74.0	54.0	343	Vertical	Pass
	22217.97	47.79	--	74.0	54.0	215	Vertical	Pass
Fundamental	2402.60	95.90	--	114.0	94.0	151.30	Horizontal	Pass
Harmonic and Spurious	1439.56	47.17	--	74.0	54.0	277.00	Horizontal	Pass
	2870.13	46.39	--	74.0	54.0	318.20	Horizontal	Pass
	4855.14	48.65	--	74.0	54.0	52.70	Horizontal	Pass
	5418.58	47.07	--	74.0	54.0	26.90	Horizontal	Pass
	7138.10	42.74	--	74.0	54.0	72	Horizontal	Pass
	8023.29	44.33	--	74.0	54.0	120	Horizontal	Pass
	11469.22	42.07	--	74.0	54.0	194	Horizontal	Pass
	14156.41	46.02	--	74.0	54.0	128	Horizontal	Pass
	15895.17	46.39	--	74.0	54.0	257	Horizontal	Pass
	20194.68	47.67	--	74.0	54.0	193	Horizontal	Pass

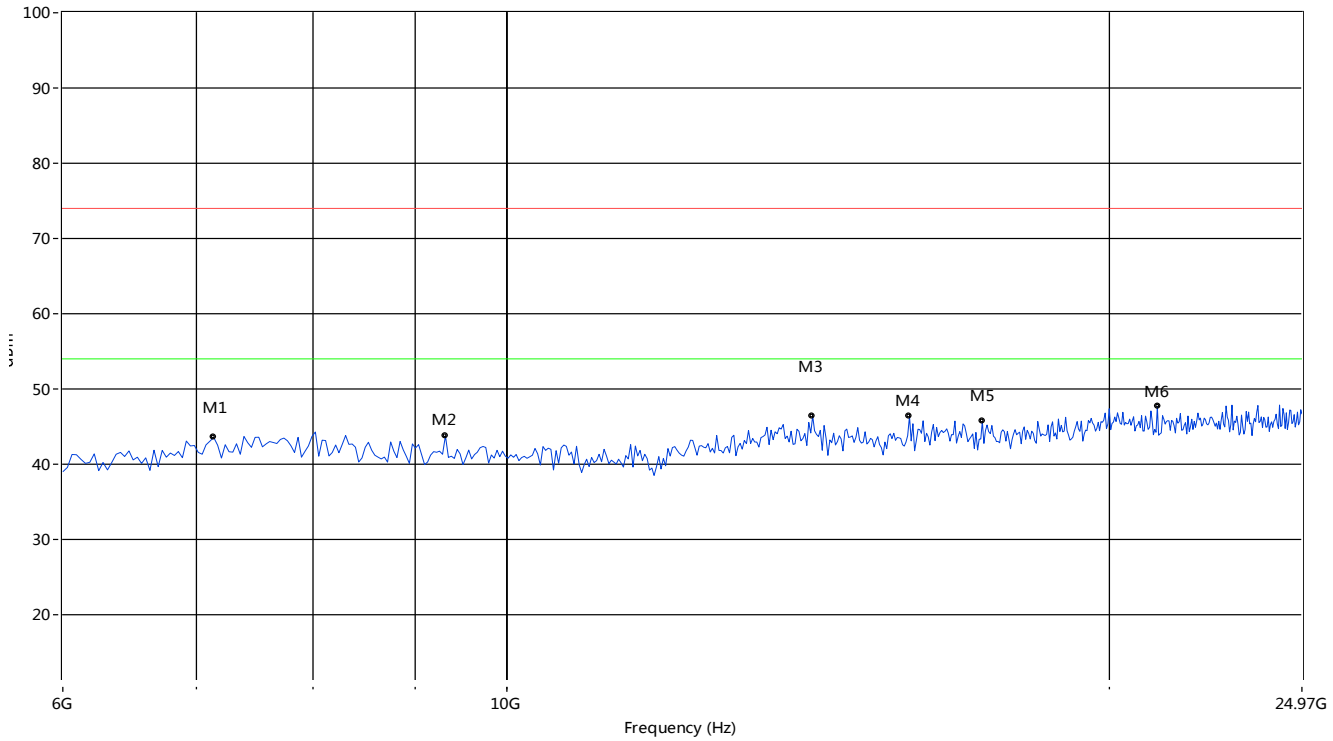
GFSK MODE 1GHz to 6GHz, ANT V



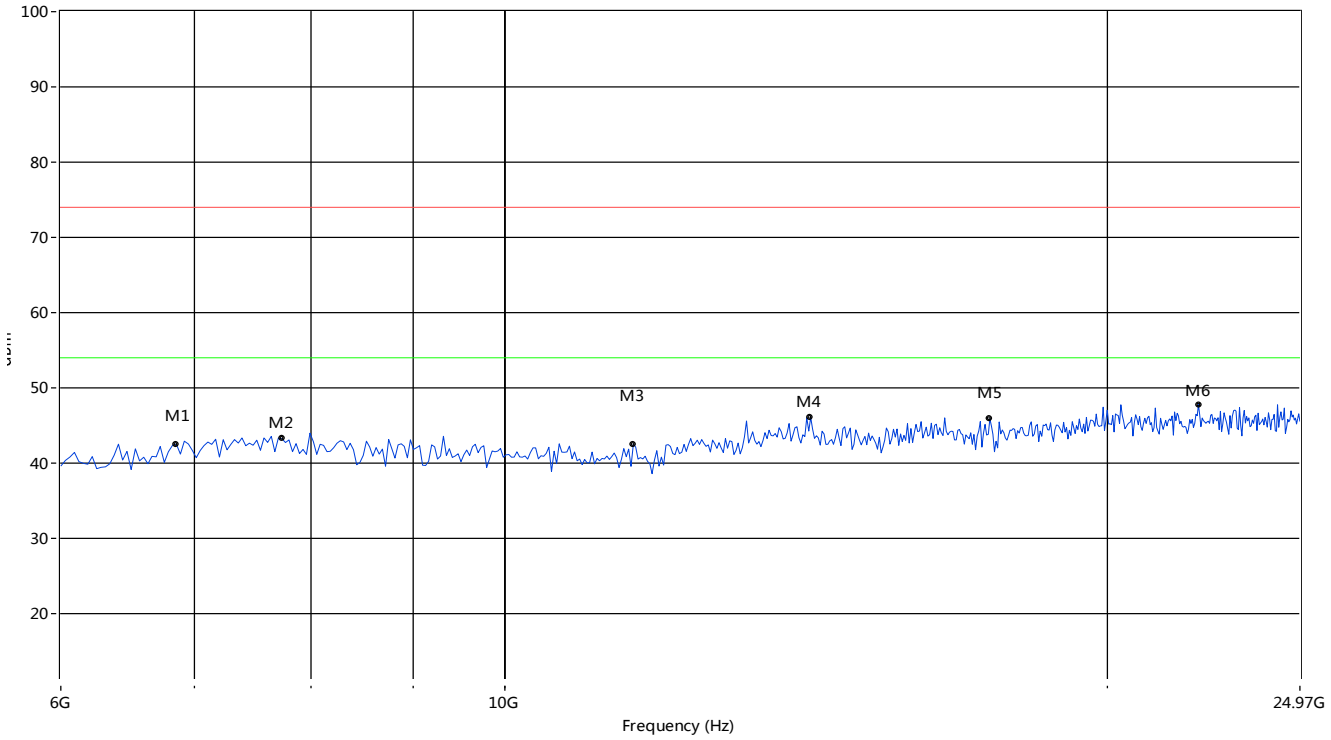
GFSK MODE 1GHz to 6GHz, ANT H



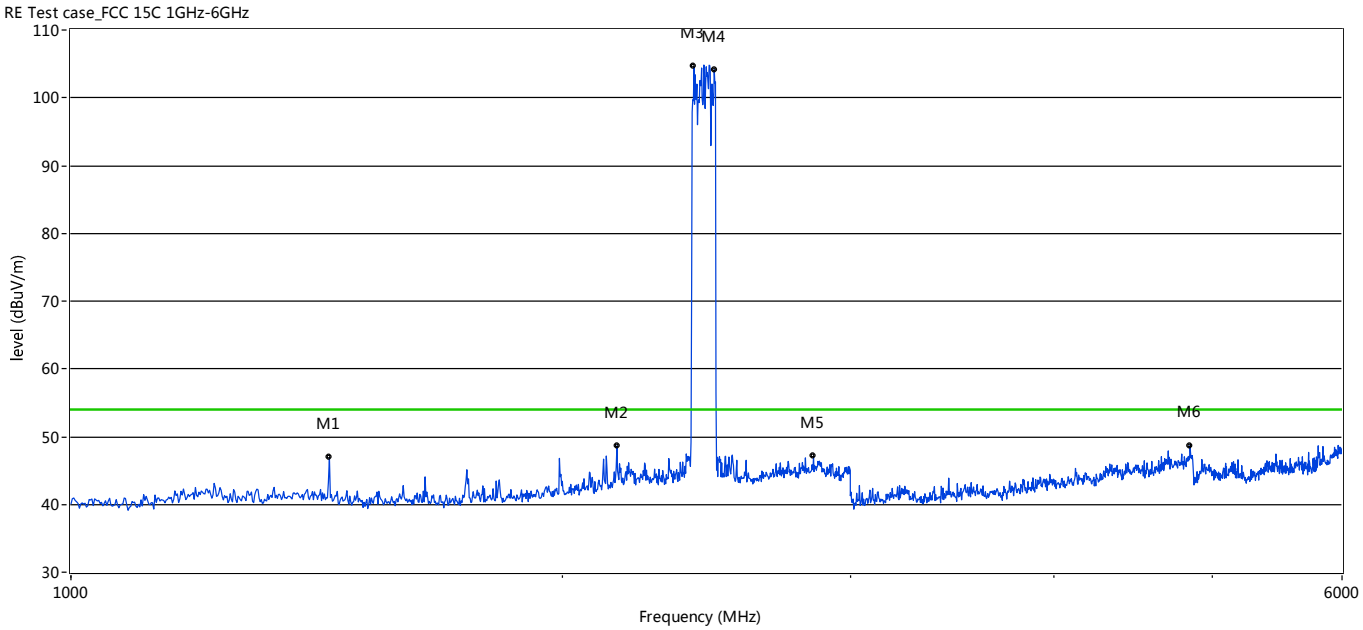
GFSK MODE 6GHz to 25GHz, ANT V



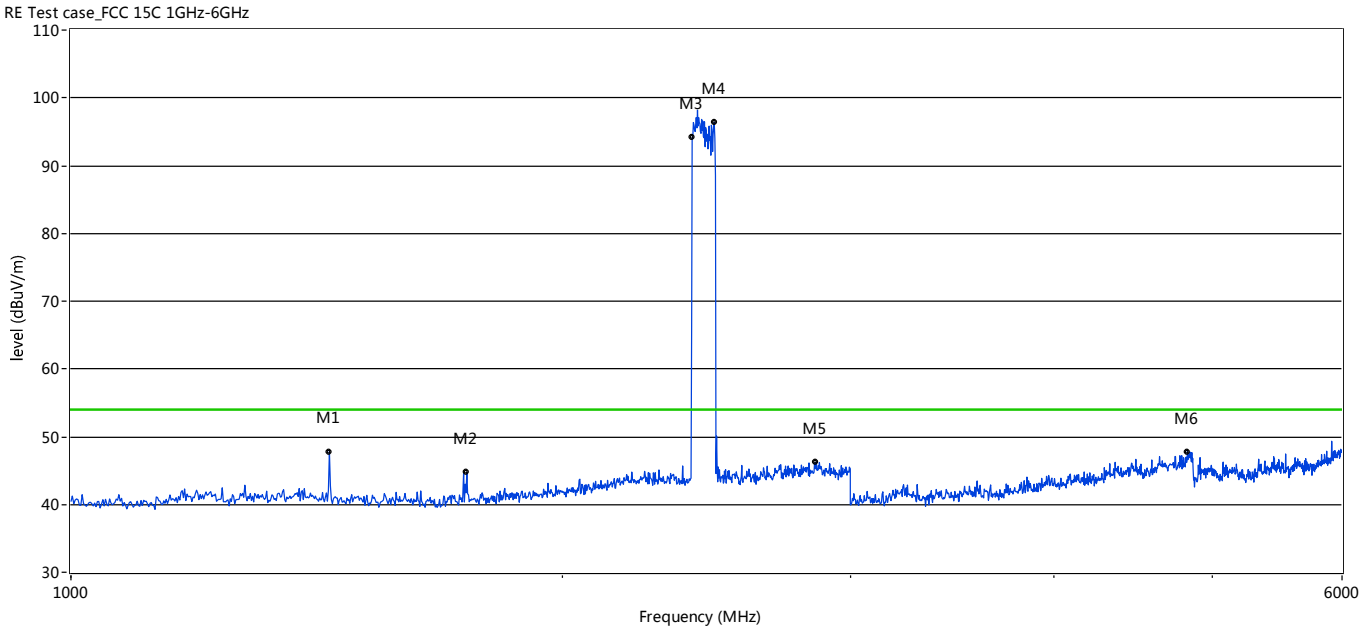
GFSK MODE 6GHz to 25GHz, ANT H



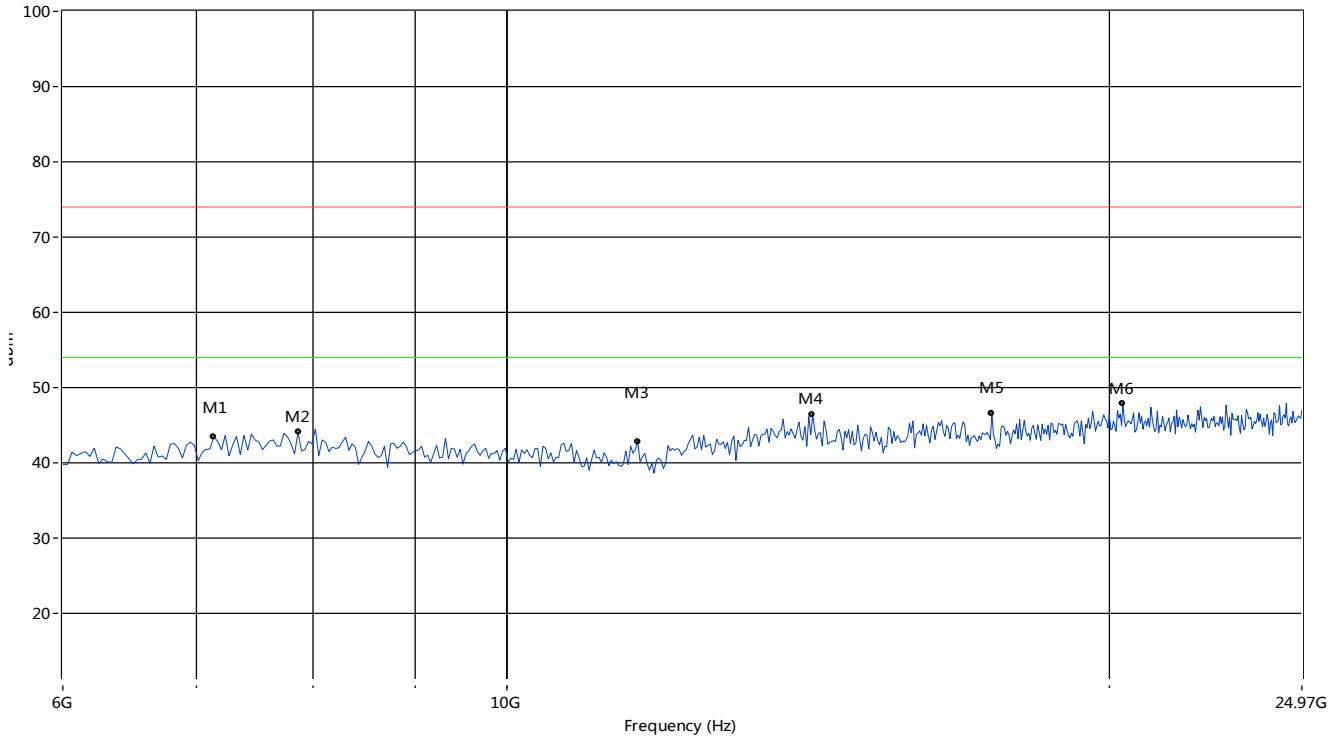
Π/4-DQPSK MODE 1GHz to 6GHz, ANT V



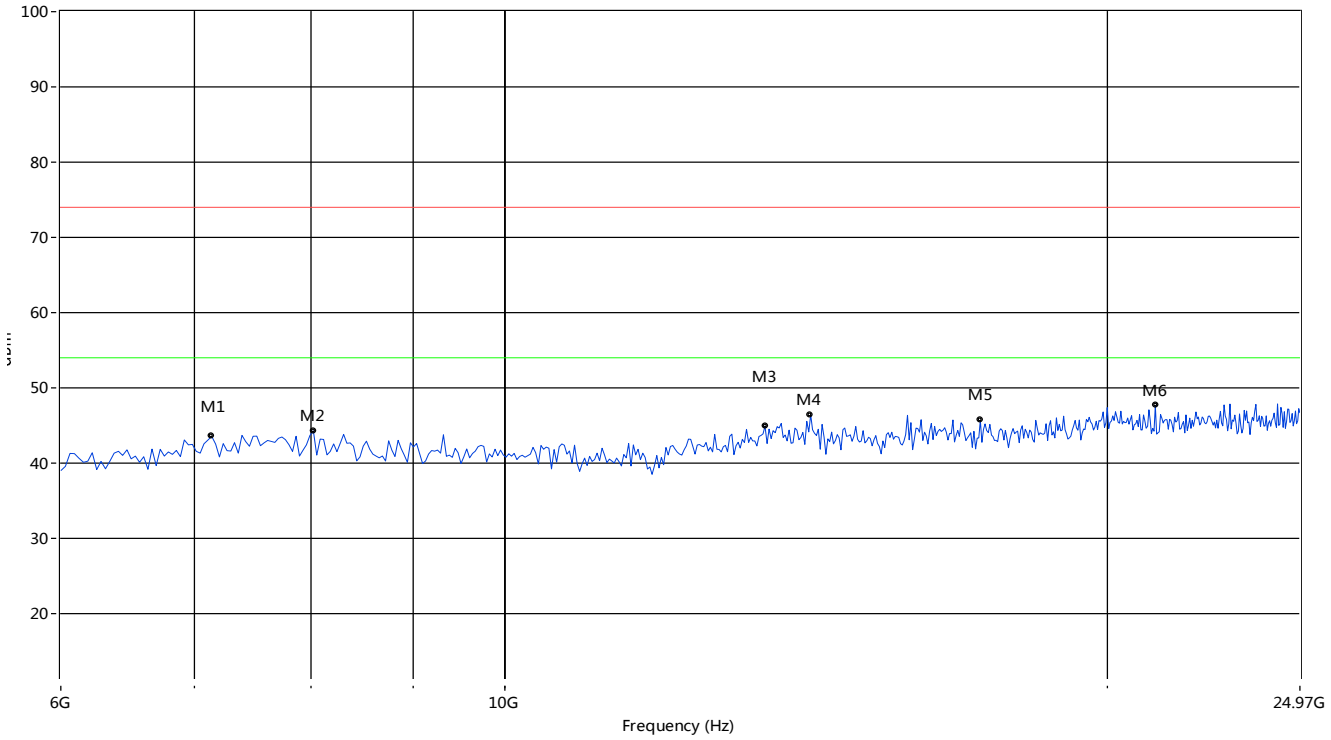
Π/4-DQPSK MODE 1GHz to 6GHz, ANT H



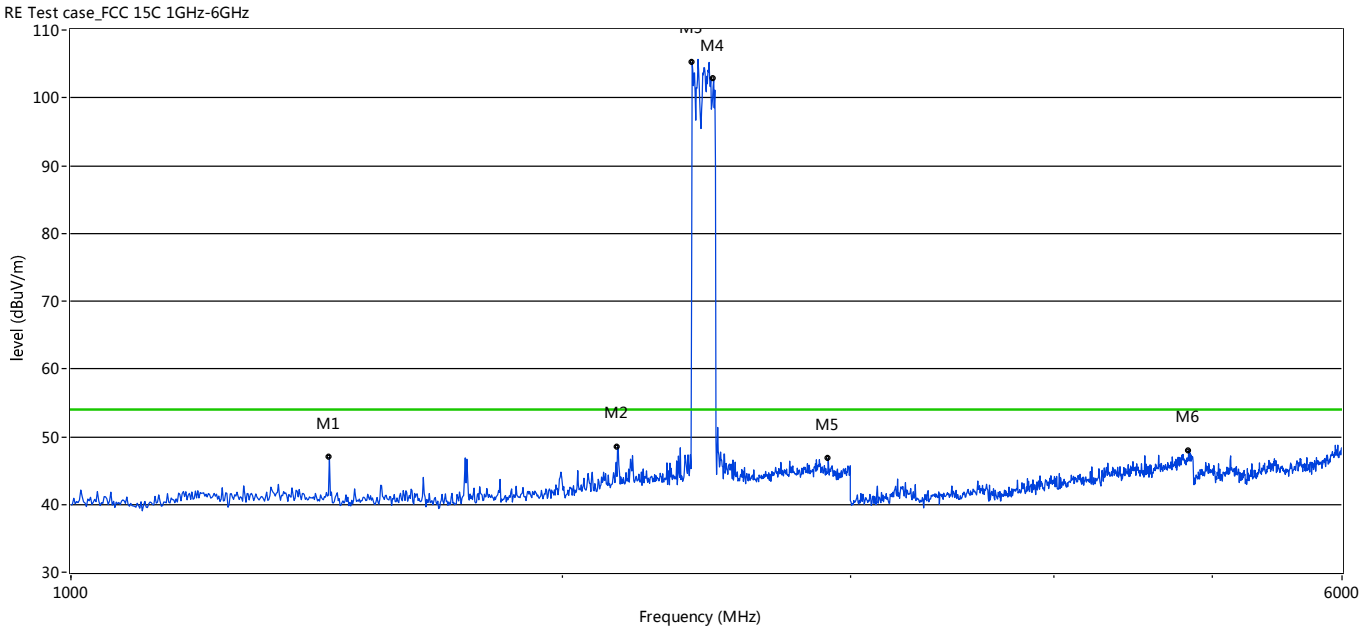
Π/4-DQPSK MODE 6GHz to 25GHz, ANT V



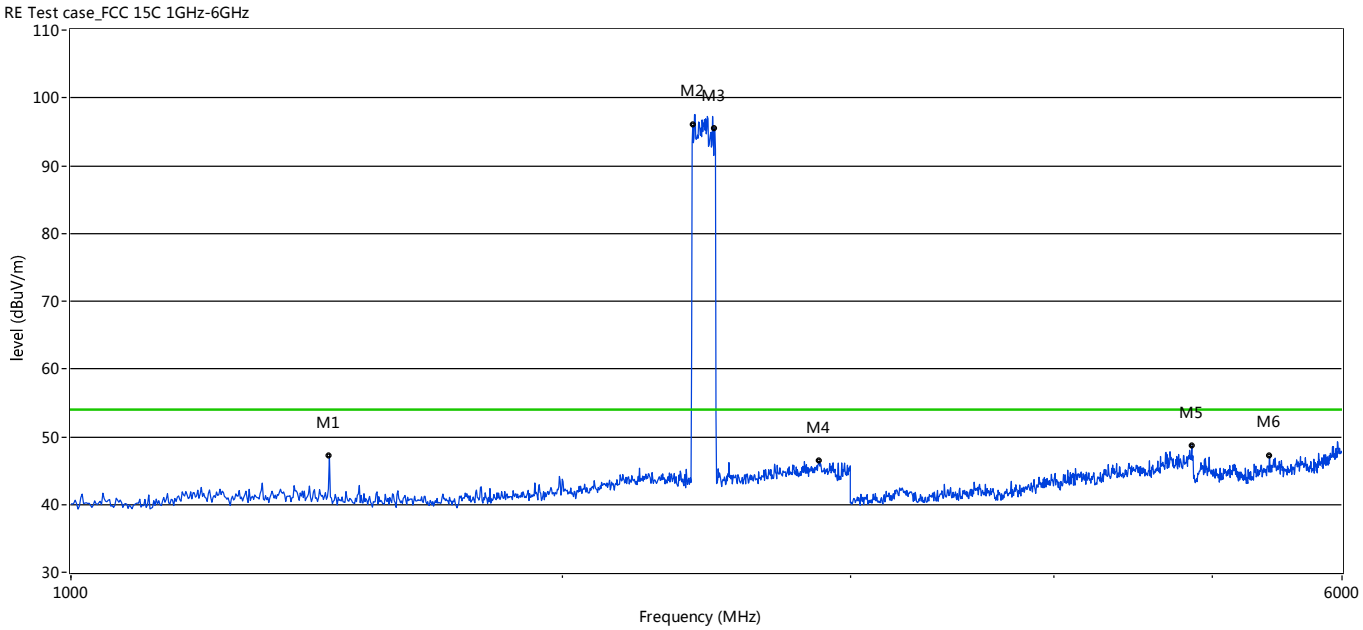
Π/4-DQPSK MODE 6GHz to 25GHz, ANT H



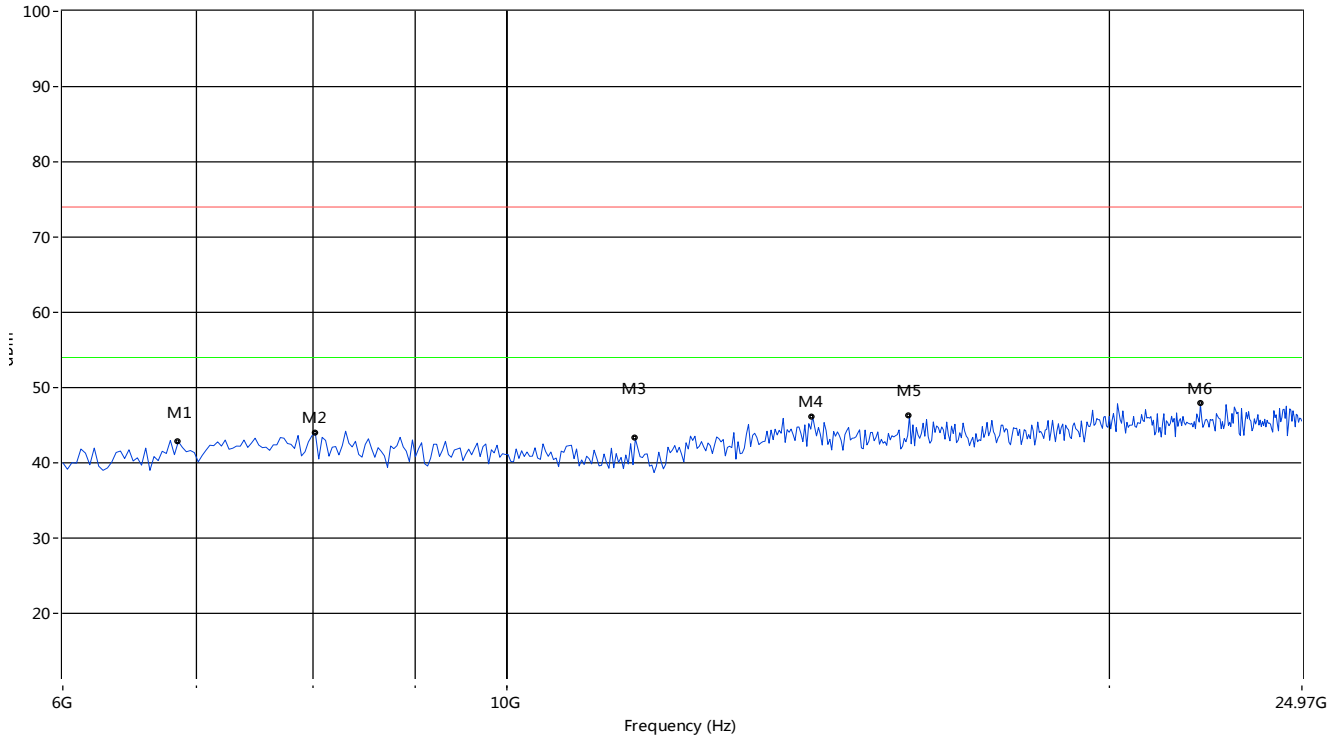
8-DPSK MODE 1GHz to 6GHz, ANT V



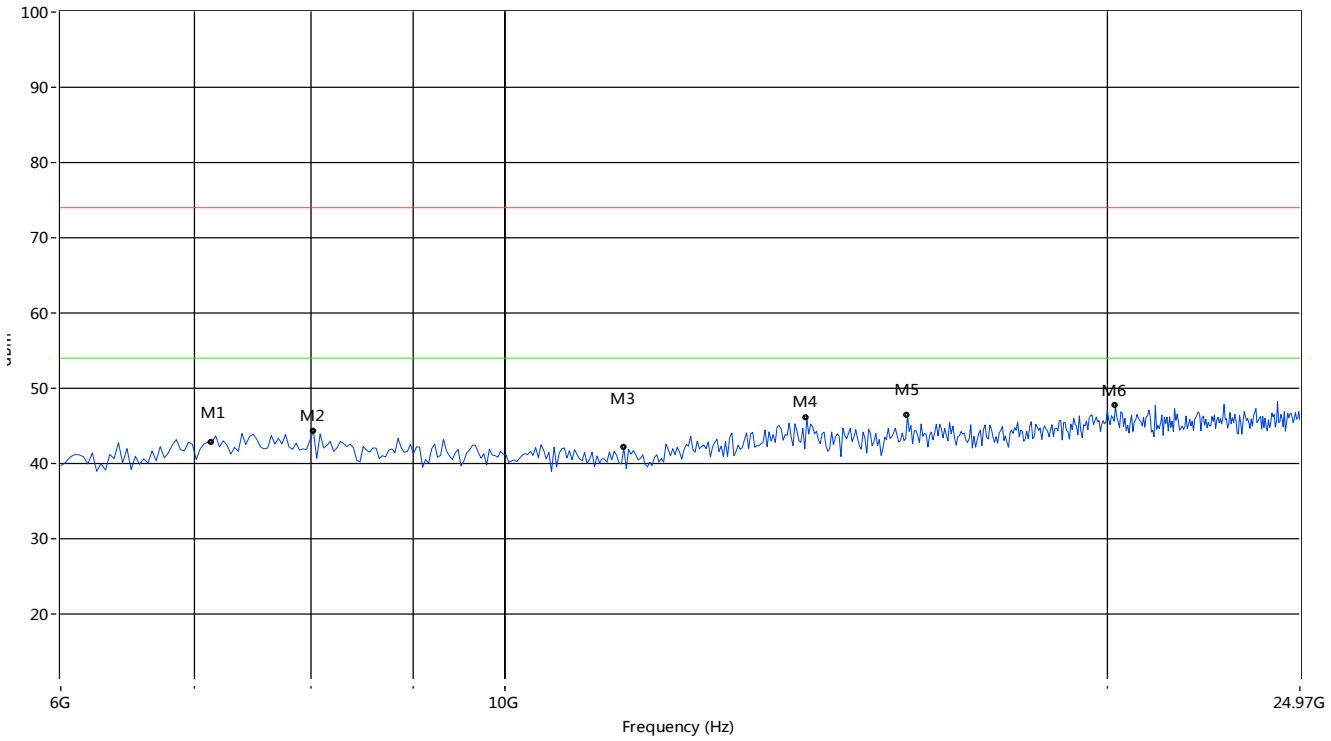
8-DPSK MODE 1GHz to 6GHz, ANT H



8-DPSK MODE 6GHz to 25GHz, ANT V



8-DPSK MODE 6GHz to 25GHz, ANT H



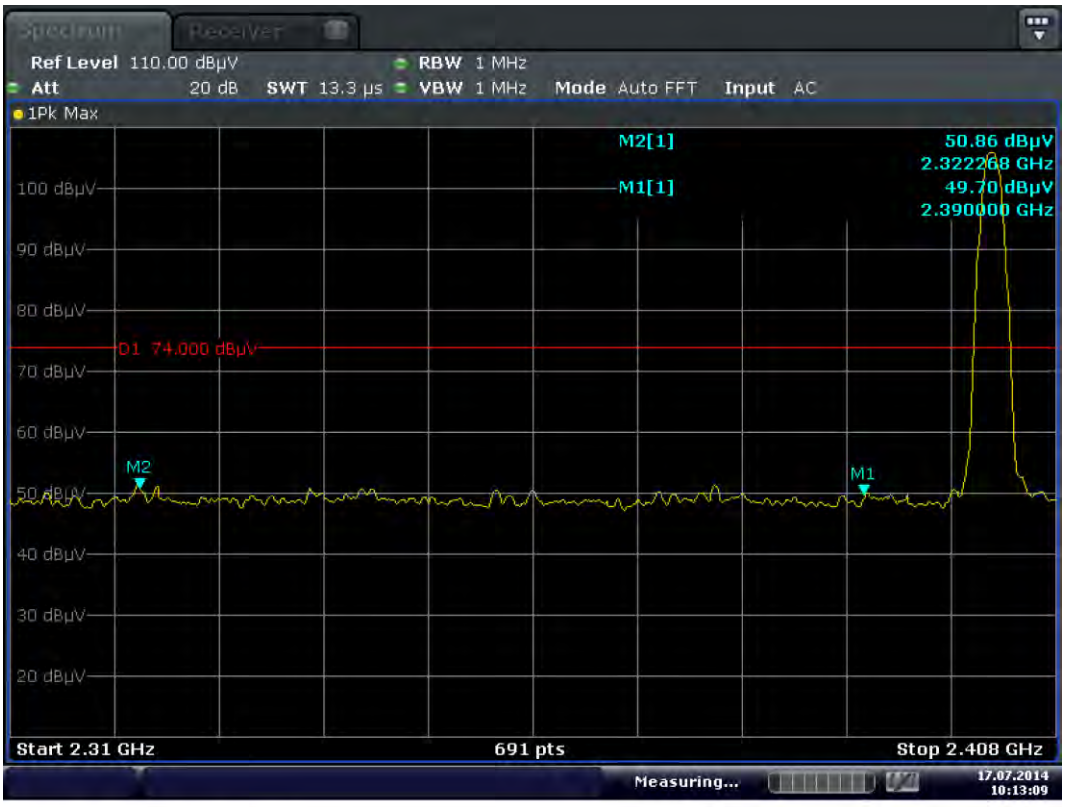
A.4 Band Edge

Test Data

The channel is tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Test Plots

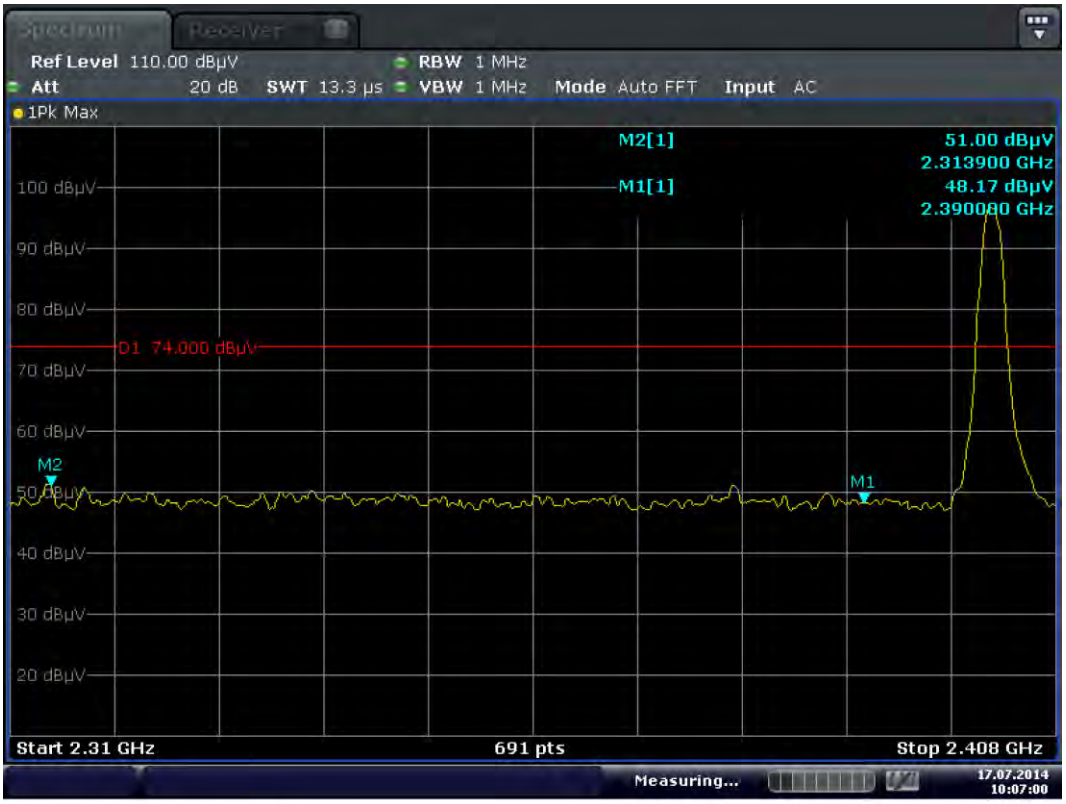
GFSK LOW CHANNEL, ANT V, PEAK



GFSK LOW CHANNEL, ANT V, AVERAGE

Date: 17.JUL.2014 10:11:01

GFSK LOW CHANNEL, ANT H, PEAK

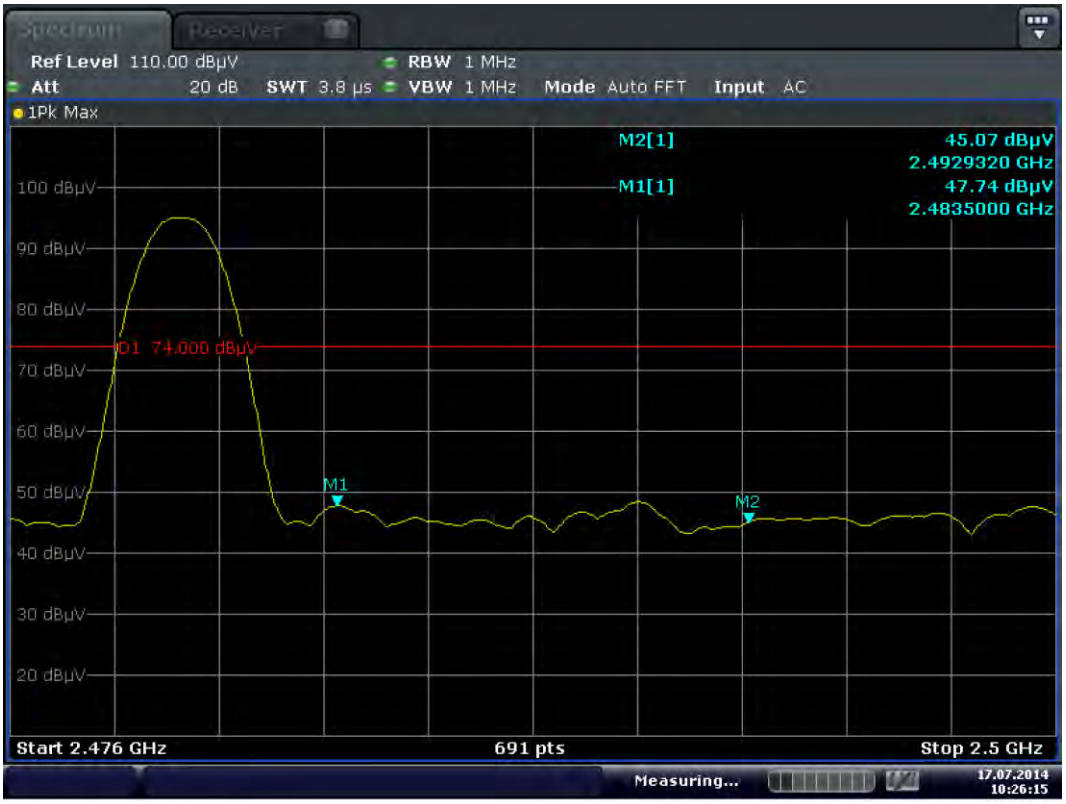


Date: 17.JUL.2014 10:07:00

GFSK LOW CHANNEL, ANT H, AVERAGE

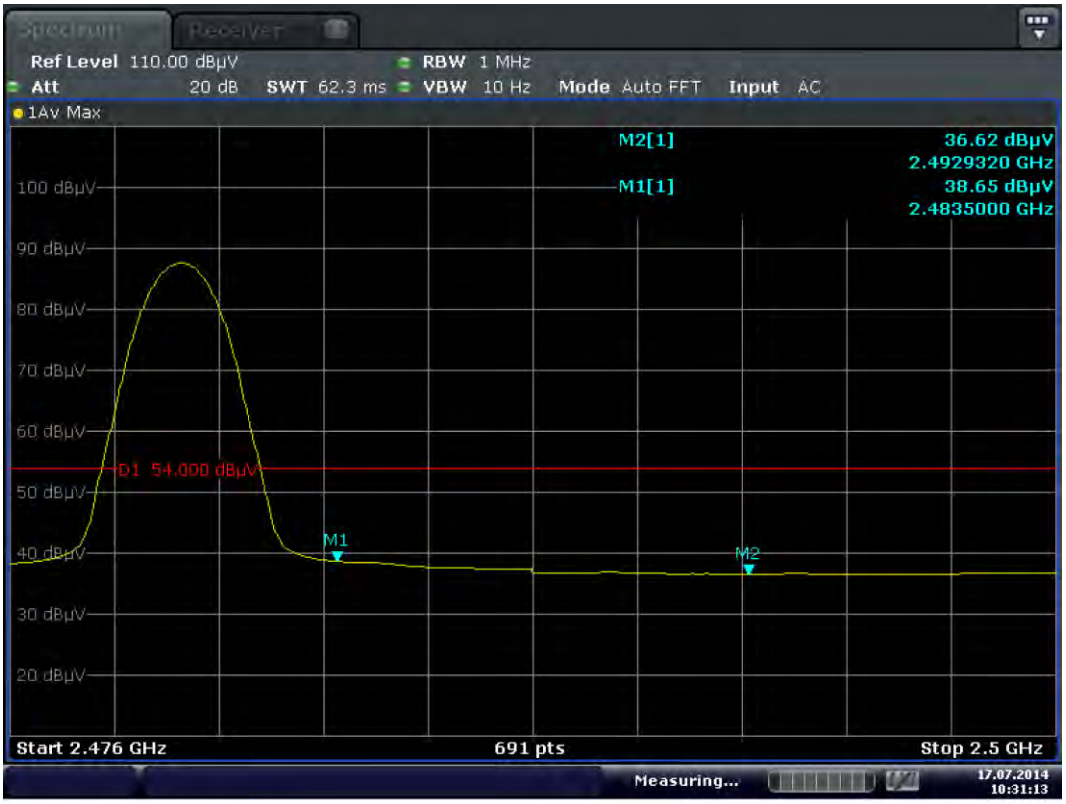
Date: 17.JUL.2014 10:08:17

GFSK HIGH CHANNEL, ANT V, PEAK



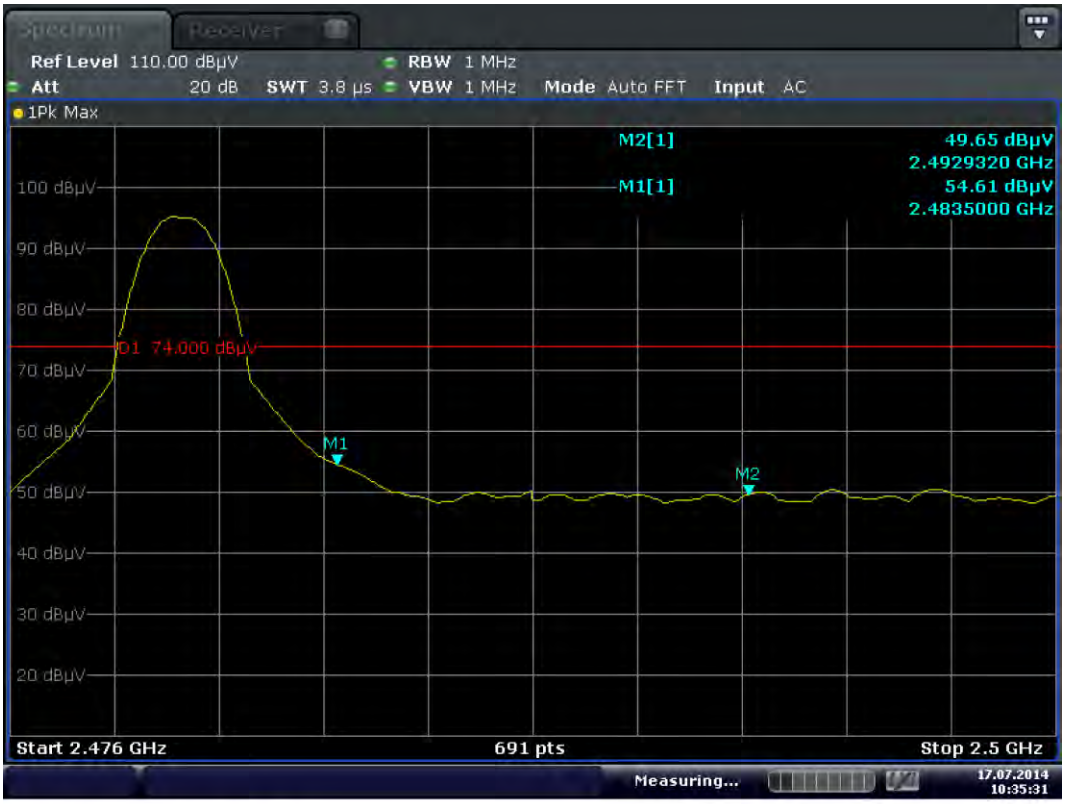
Date: 17.JUL.2014 10:26:15

GFSK HIGH CHANNEL, ANT V, AVERAGE



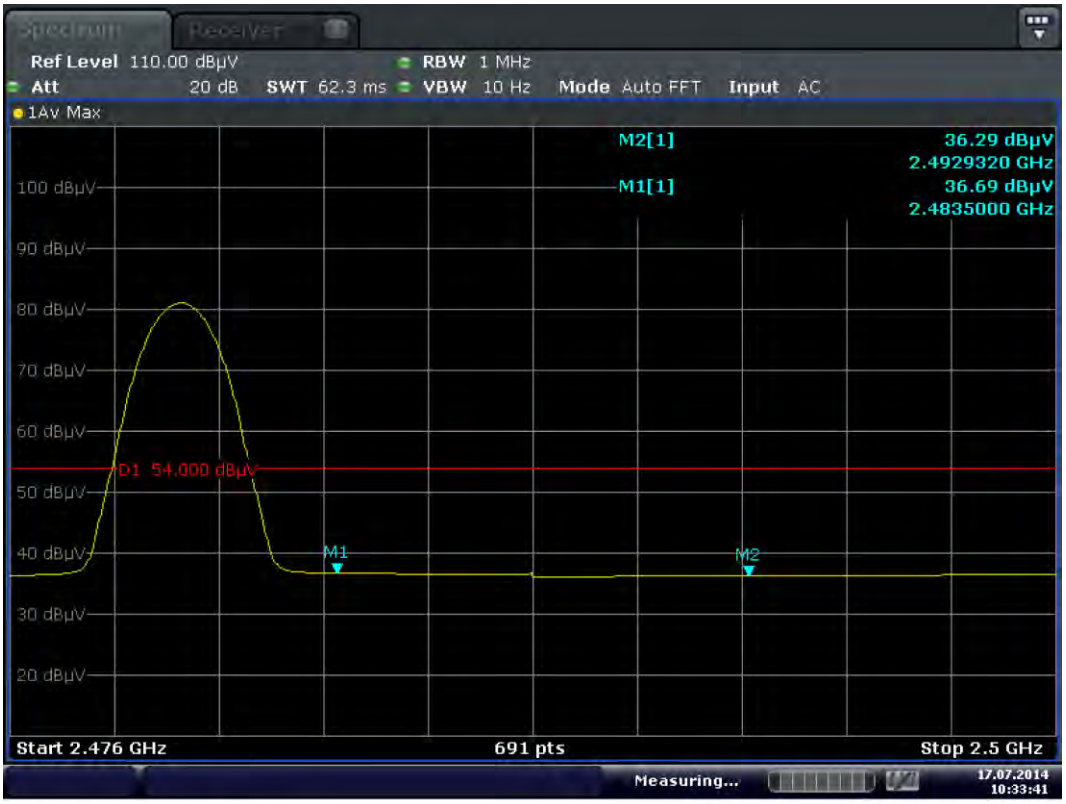
Date: 17.JUL.2014 10:31:13

GFSK HIGH CHANNEL, ANT H, PEAK



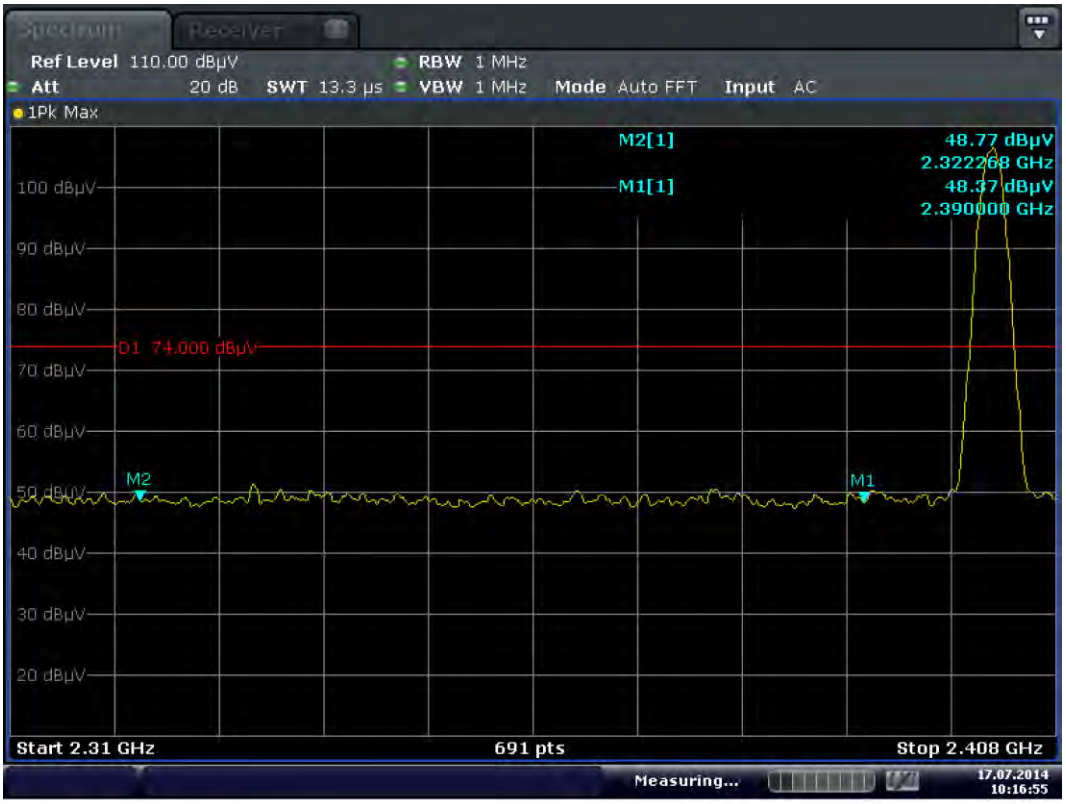
Date: 17.JUL.2014 10:35:31

GFSK HIGH CHANNEL, ANT H, AVERAGE



Date: 17.JUL.2014 10:33:41

π/4DQPSK LOW CHANNEL, ANT V, PEAK

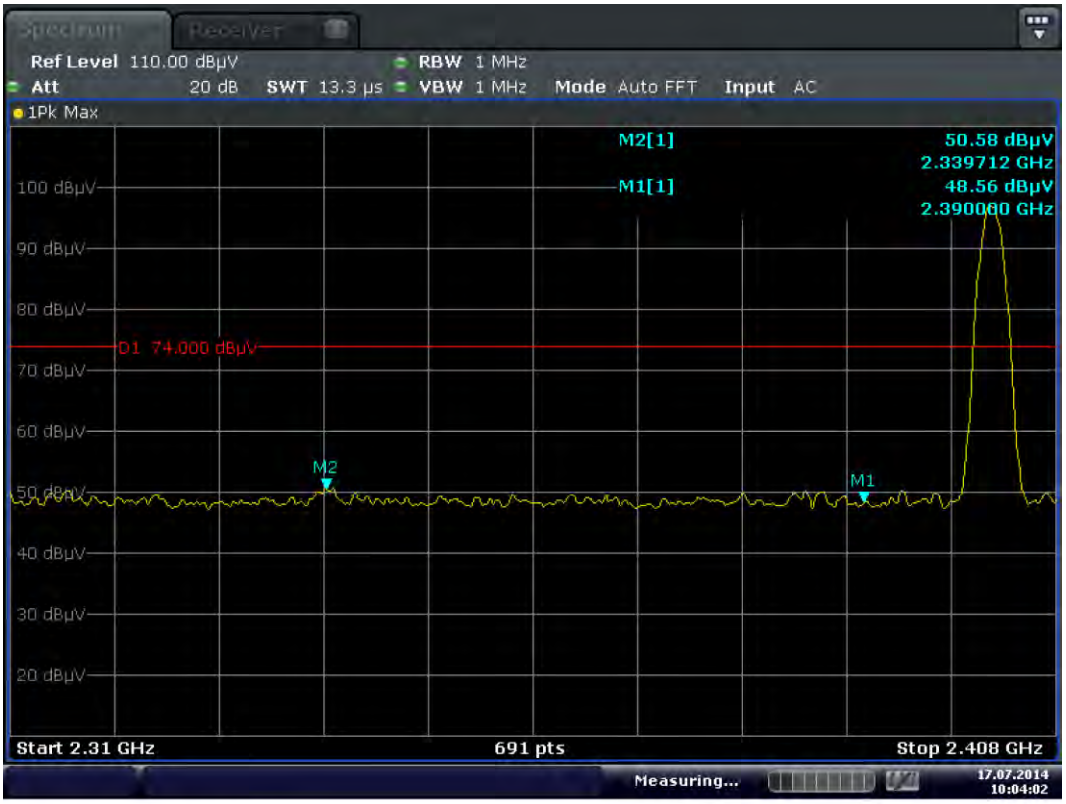


Date: 17.JUL.2014 10:16:55

GFSK LOW CHANNEL, ANT V, AVERAGE

Date: 17.JUL.2014 10:18:42

π/4DQPSK LOW CHANNEL, ANT H, PEAK

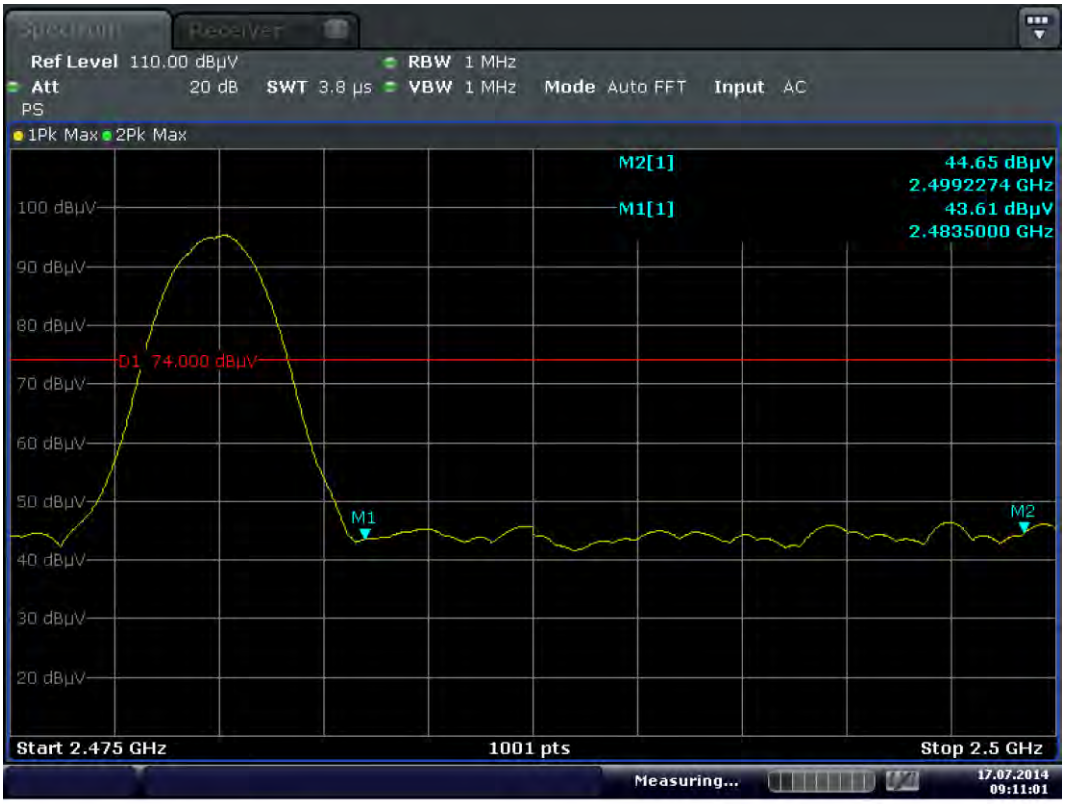


Date: 17.JUL.2014 10:04:01

π /4DQPSK LOW CHANNEL, ANT H, AVERAGE

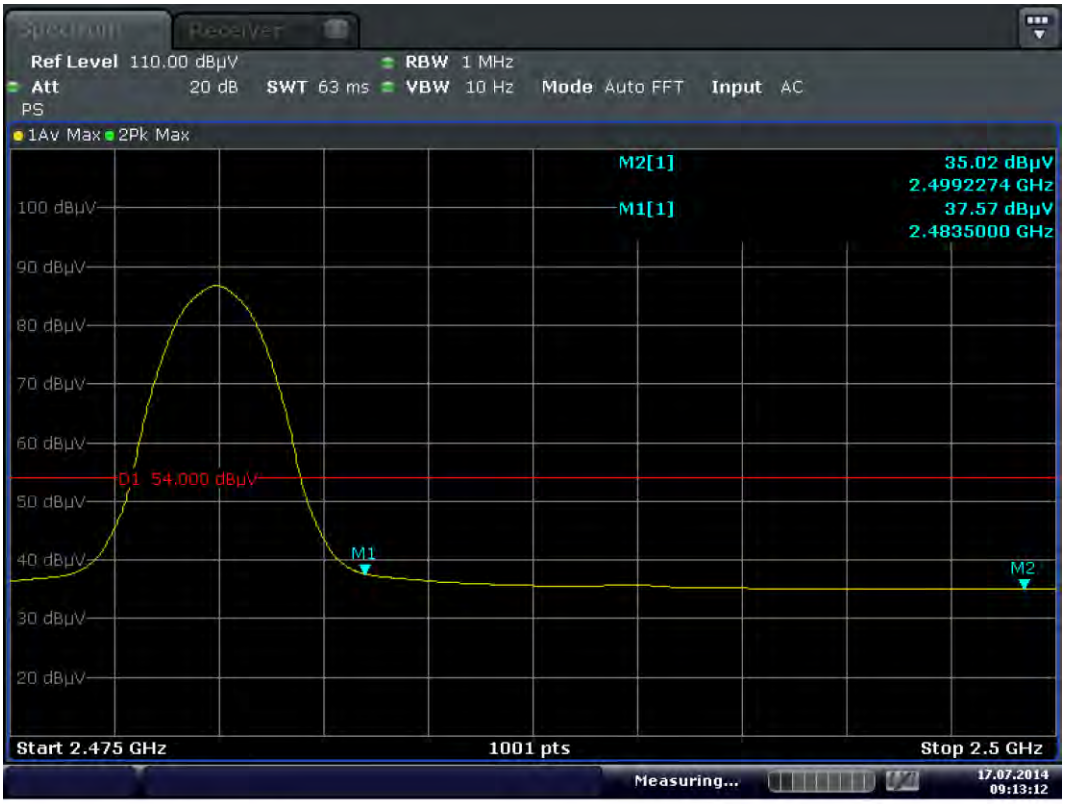
Date: 17.JUL.2014 10:02:20

π /4DQPSK HIGH CHANNEL, ANT V, PEAK



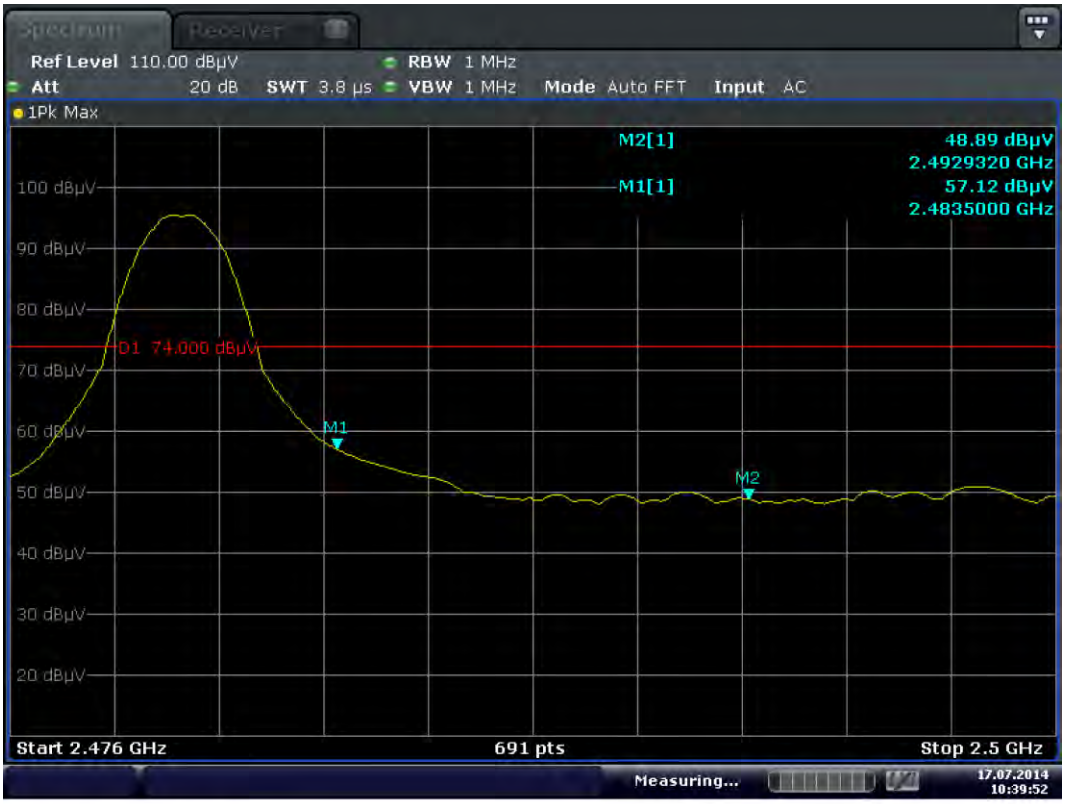
Date: 17.JUL.2014 09:11:01

π /4DQPSK HIGH CHANNEL, ANT V, AVERAGE



Date: 17.JUL.2014 09:13:12

π /4DQPSK HIGH CHANNEL, ANT H, PEAK

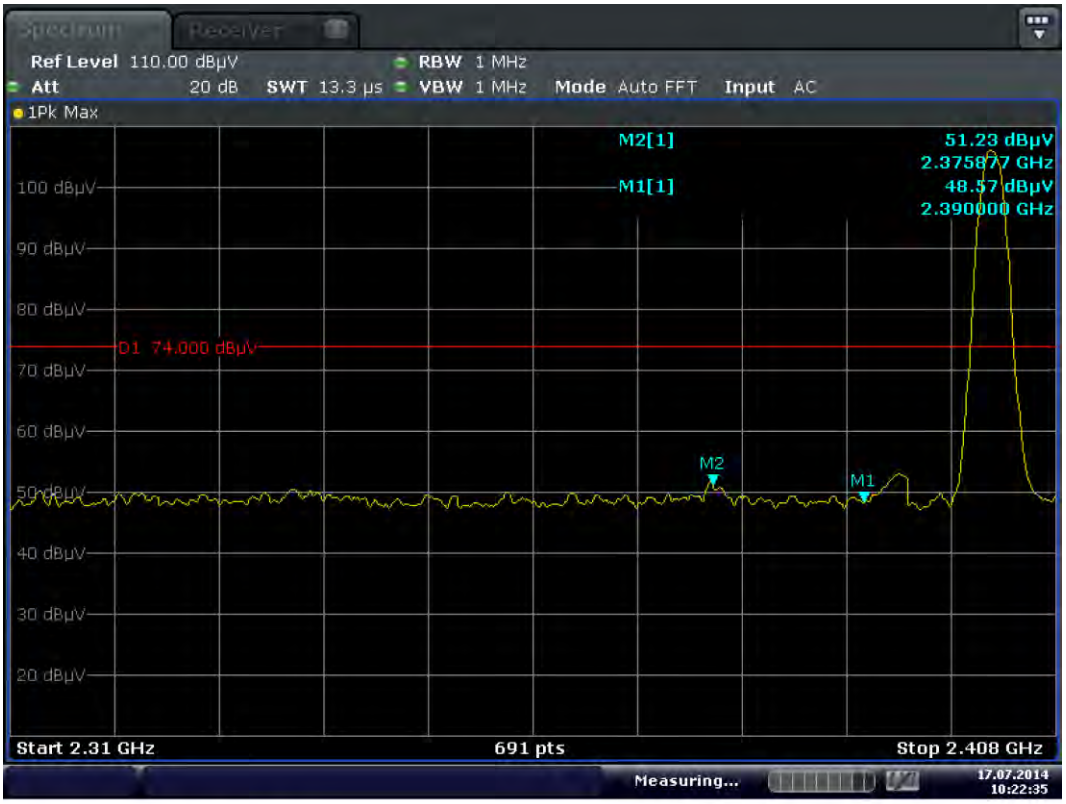


Date: 17.JUL.2014 10:39:51

π /4DQPSK HIGH CHANNEL, ANT H, AVERAGE

Date: 17.JUL.2014 10:41:28

8-DPSK LOW CHANNEL, ANT V, PEAK

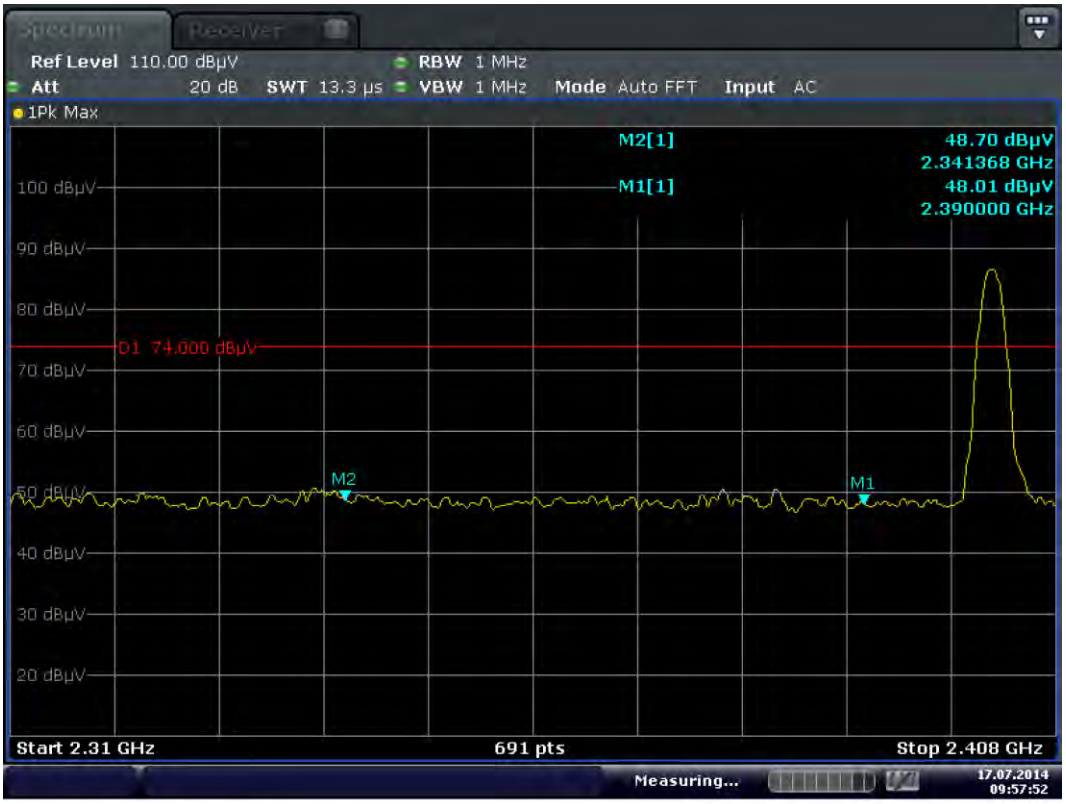


Date: 17.JUL.2014 10:22:35

8-DPSK LOW CHANNEL, ANT V, AVERAGE

Date: 17.JUL.2014 10:20:50

8-DPSK LOW CHANNEL, ANT H, PEAK

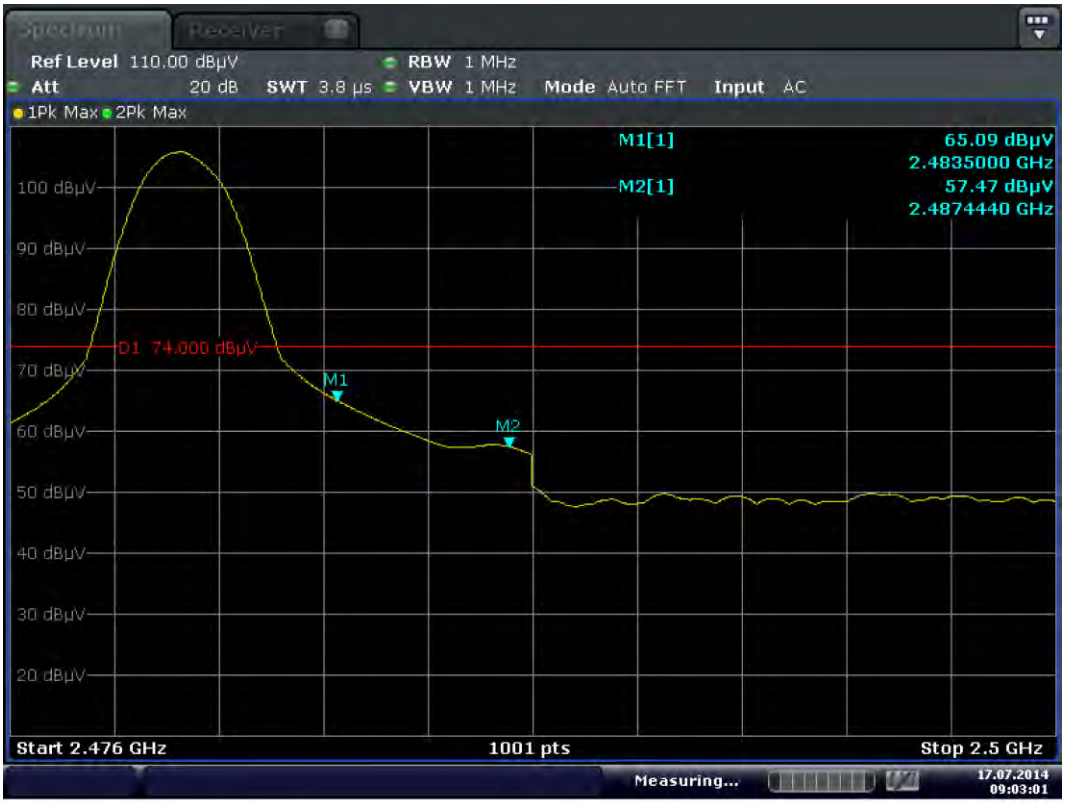


Date: 17.JUL.2014 09:57:52

8-DPSK LOW CHANNEL, ANT H, AVERAGE

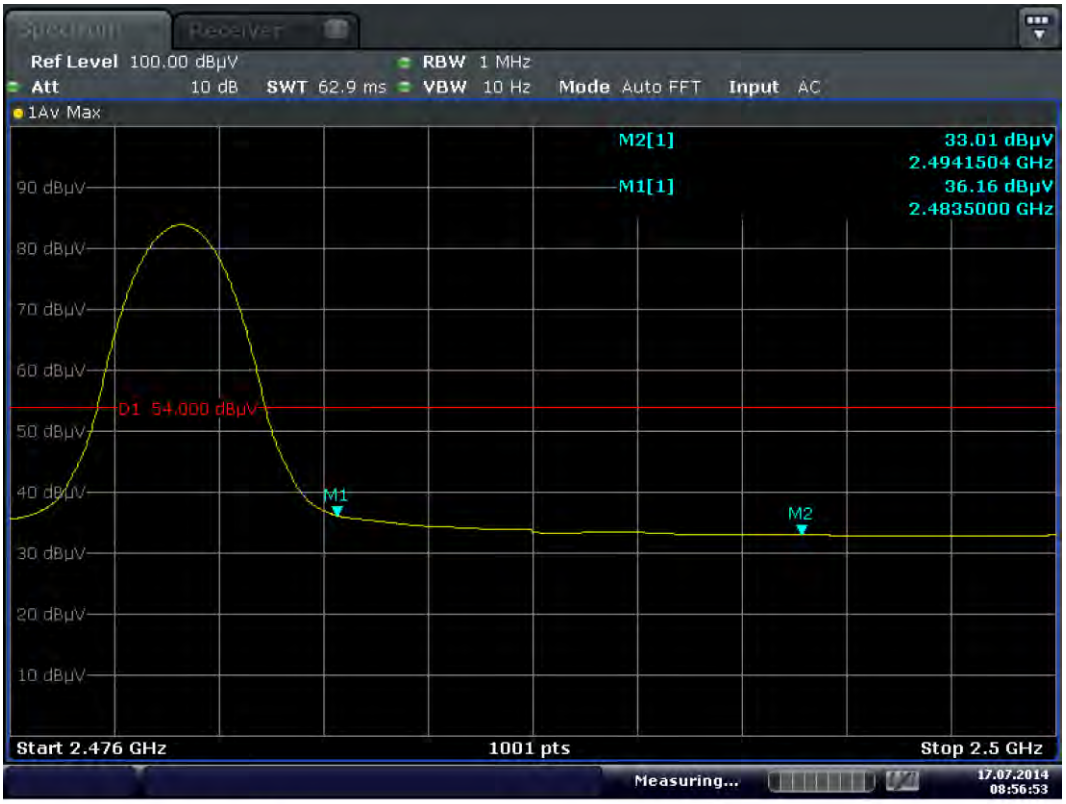
Date: 17.JUL.2014 10:00:07

8-DPSK HIGH CHANNEL, NT V, PEAK



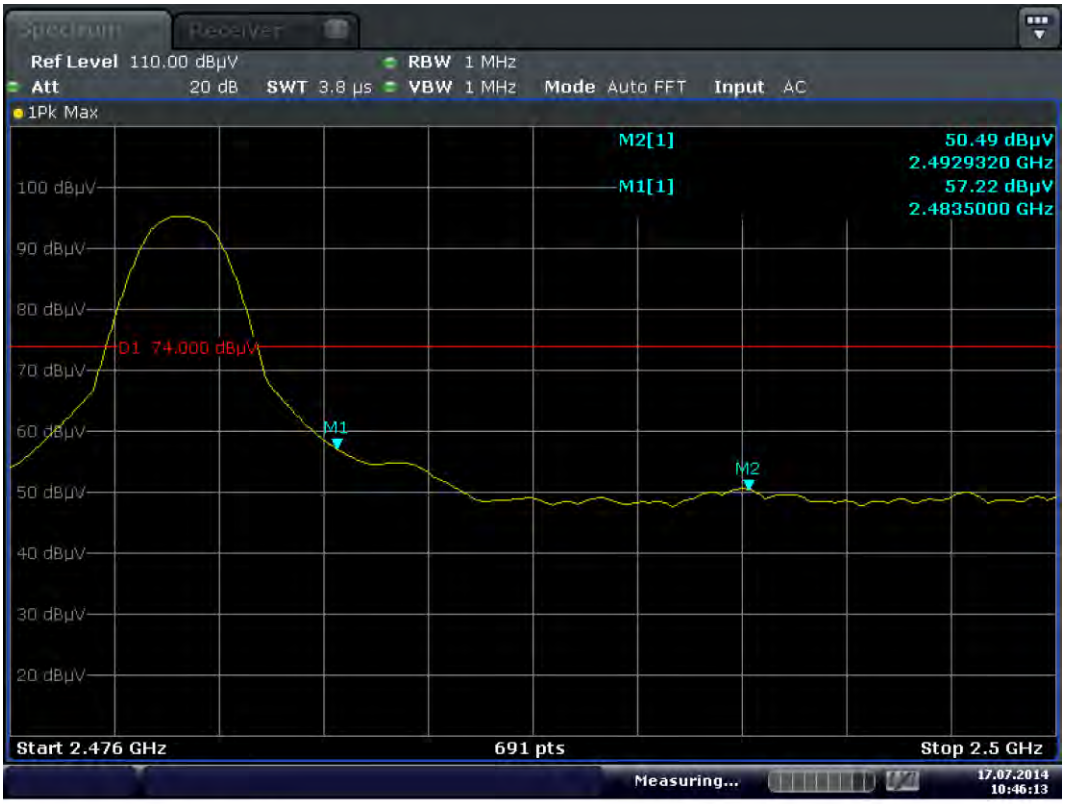
Date: 17.JUL.2014 09:03:01

8-DPSK HIGH CHANNEL, ANT V, AVERAGE



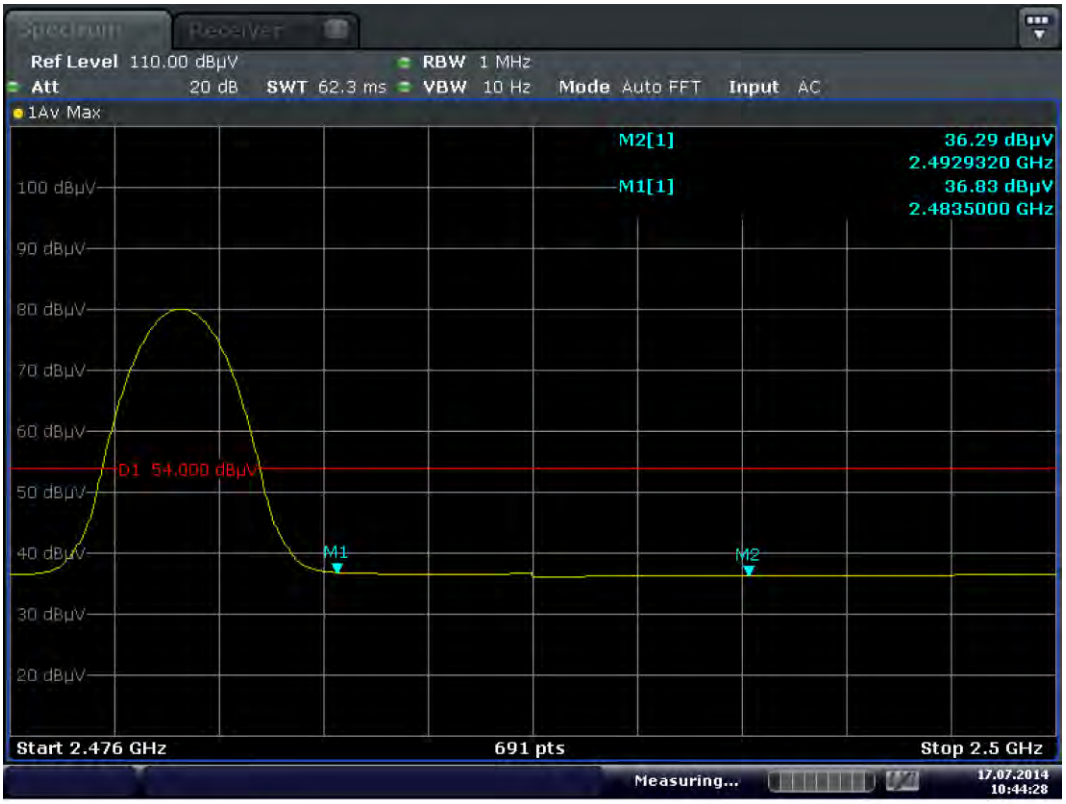
Date: 17.JUL.2014 08:56:53

8-DPSK HIGH CHANNEL, ANT H, PEAK



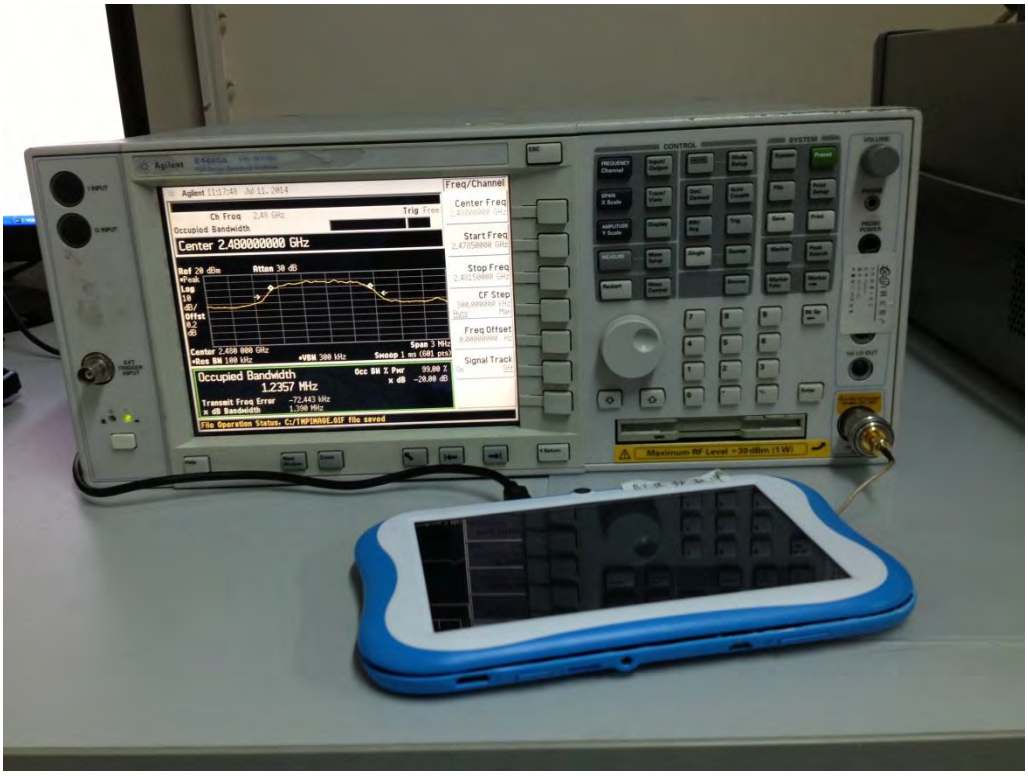
Date: 17.JUL.2014 10:46:13

8-DPSK HIGH CHANNEL, ANT H, AVERAGE

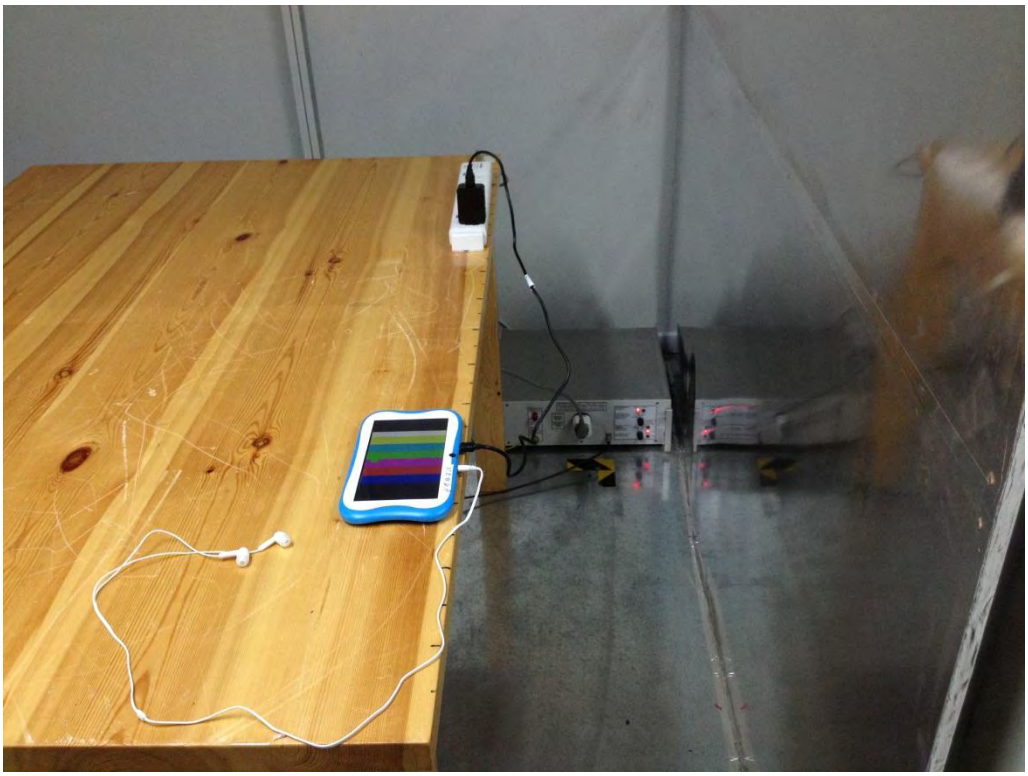


ANNEX B TEST SETUP PHOTOS

B.1 Conducted Test Photo



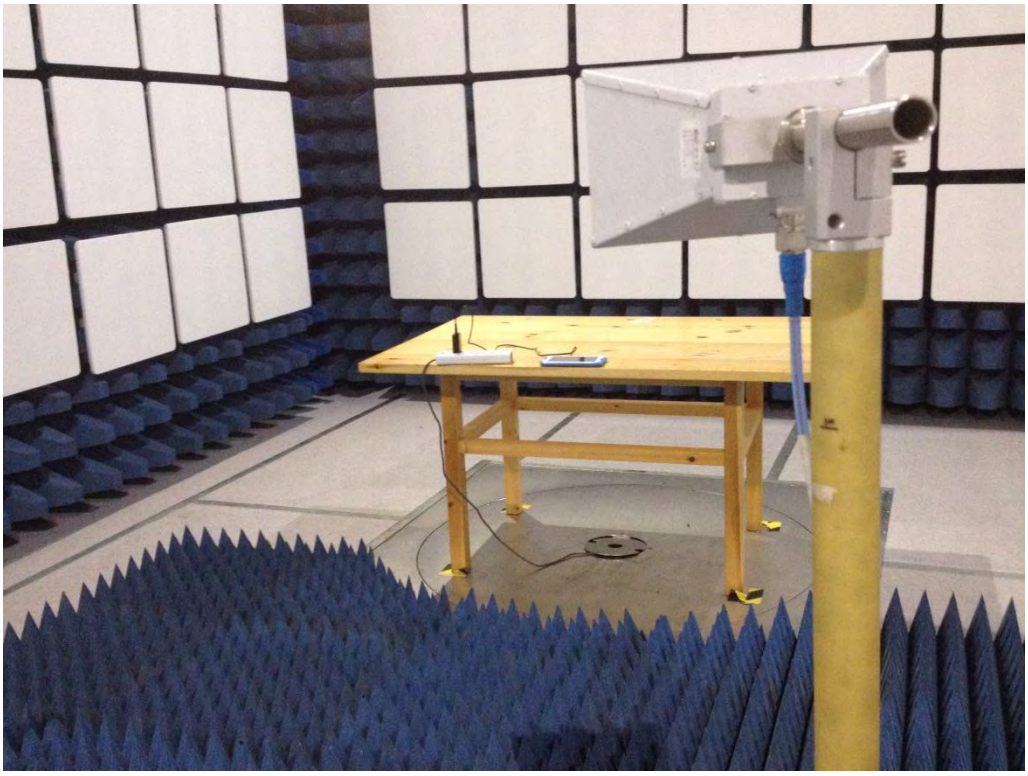
B.2 Conducted Emission



B.3 Radiated Test Photo

Below 30MHz

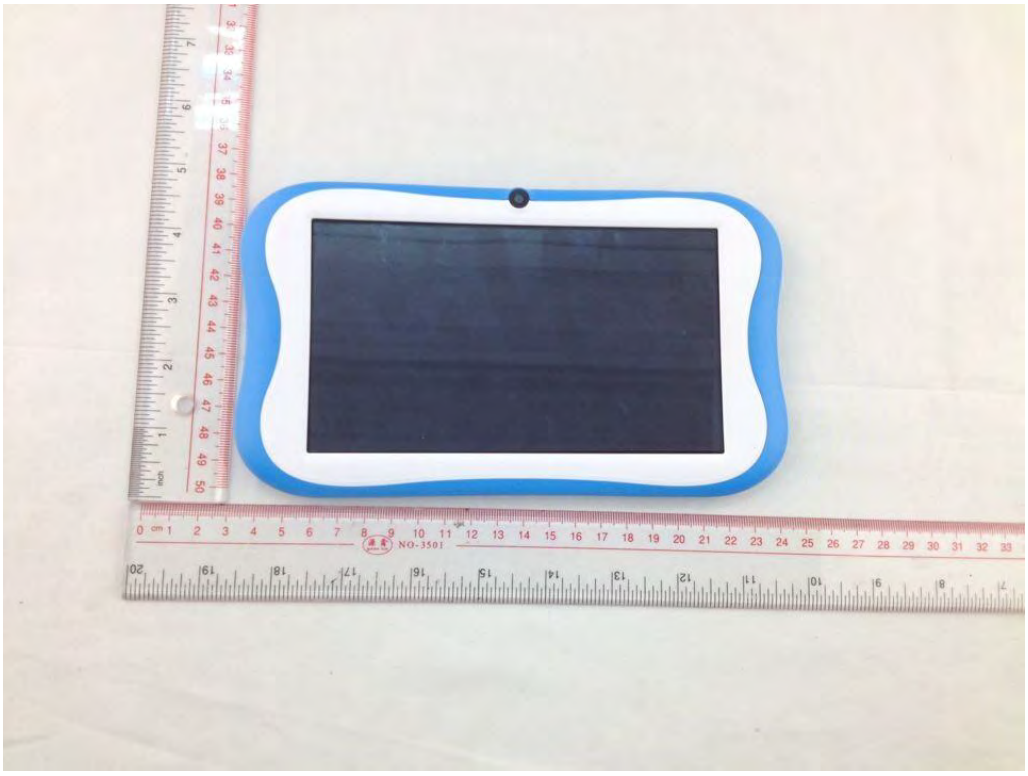
30MHz to 1GHz



Above 1GHz

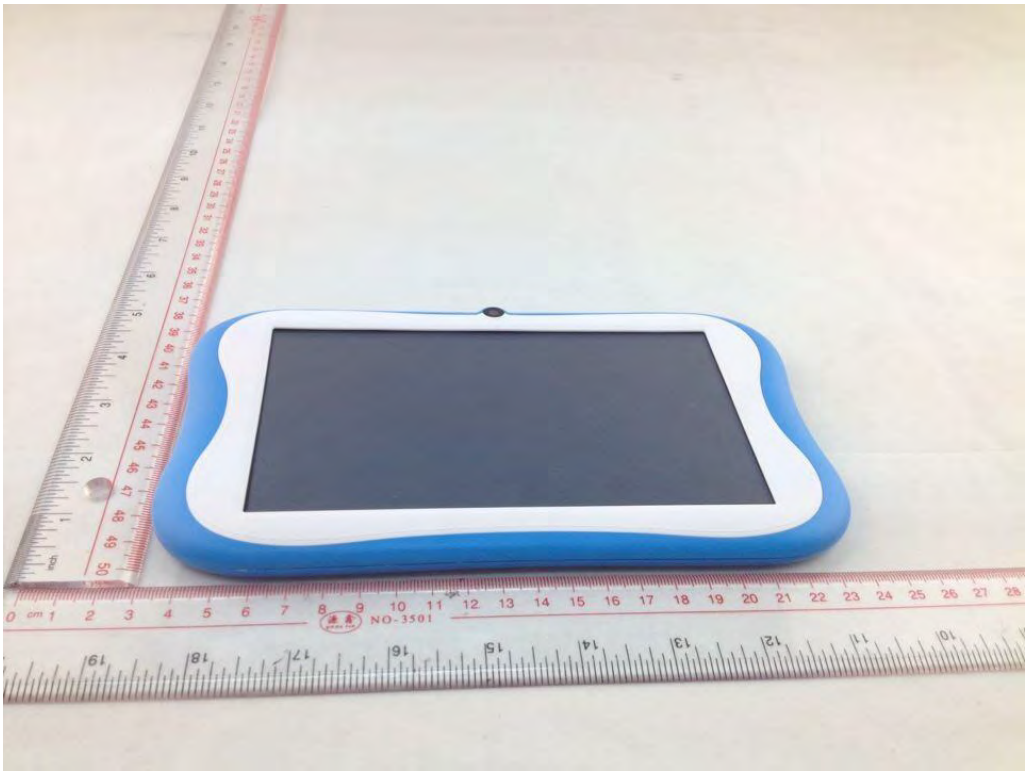
ANNEX C EUT PHOTOS

C.1 Appearance of the EUT

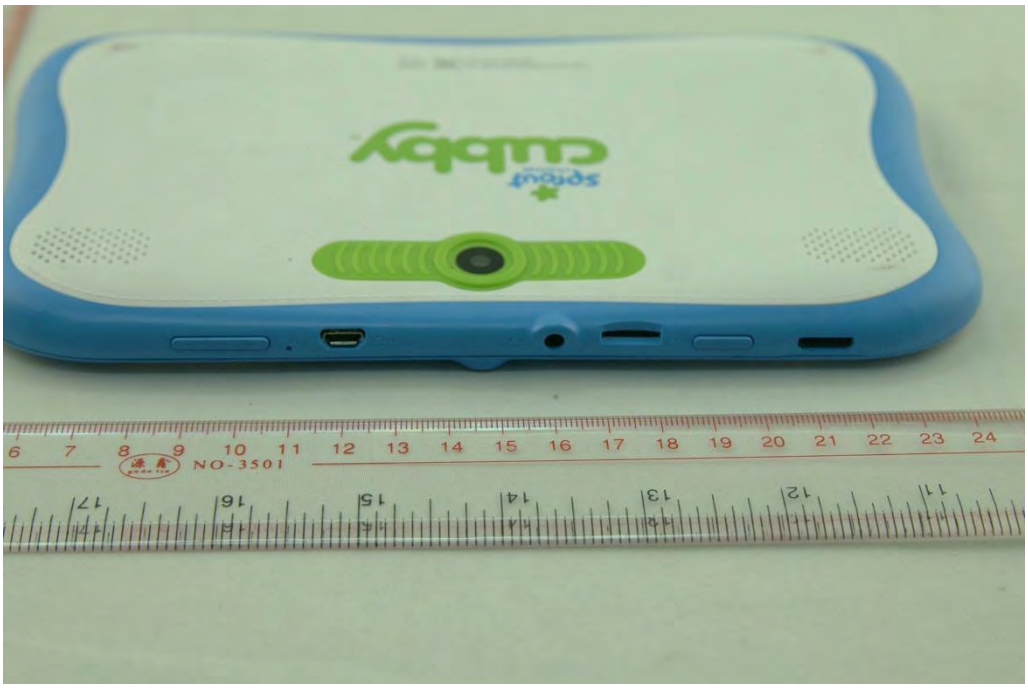


THE FRONT OF EUT

THE BACK OF EUT



THE DOWN OF EUT



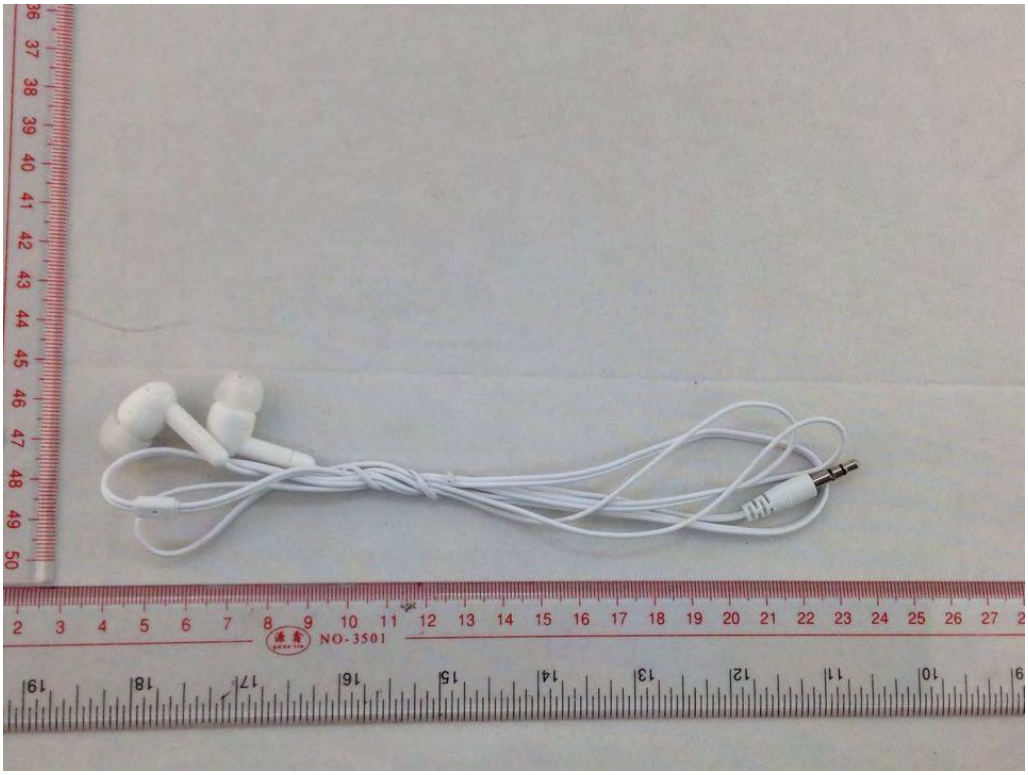
THE UP OF EUT

THE LEFT OF EUT

THE RIGHT OF EUT

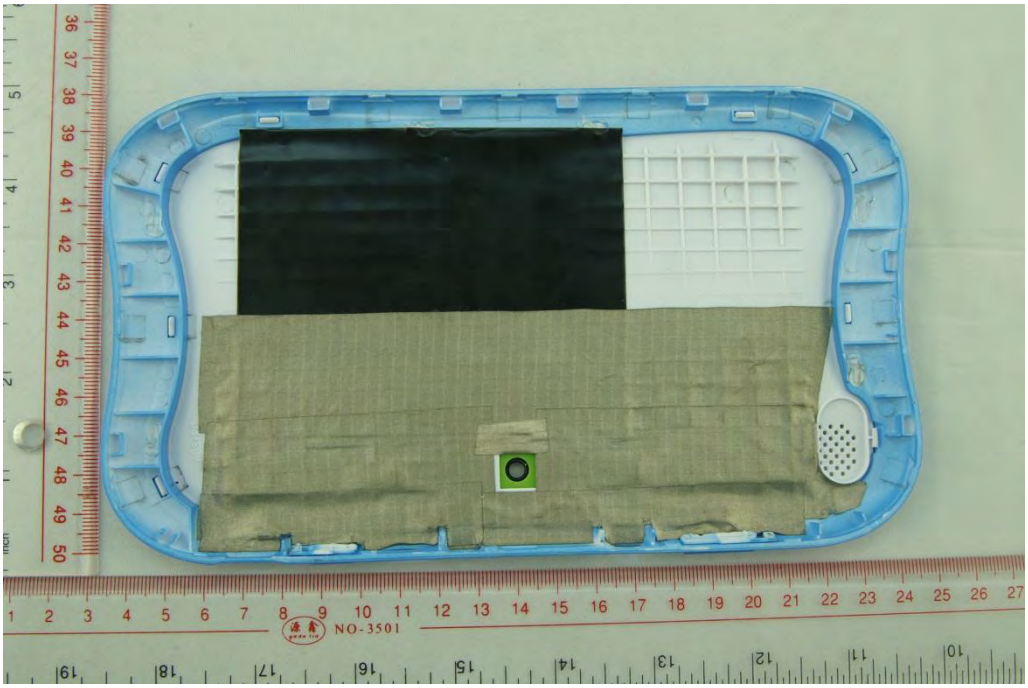
THE CHARGER OF EUT

THE USB DATA CABLE OF EUT

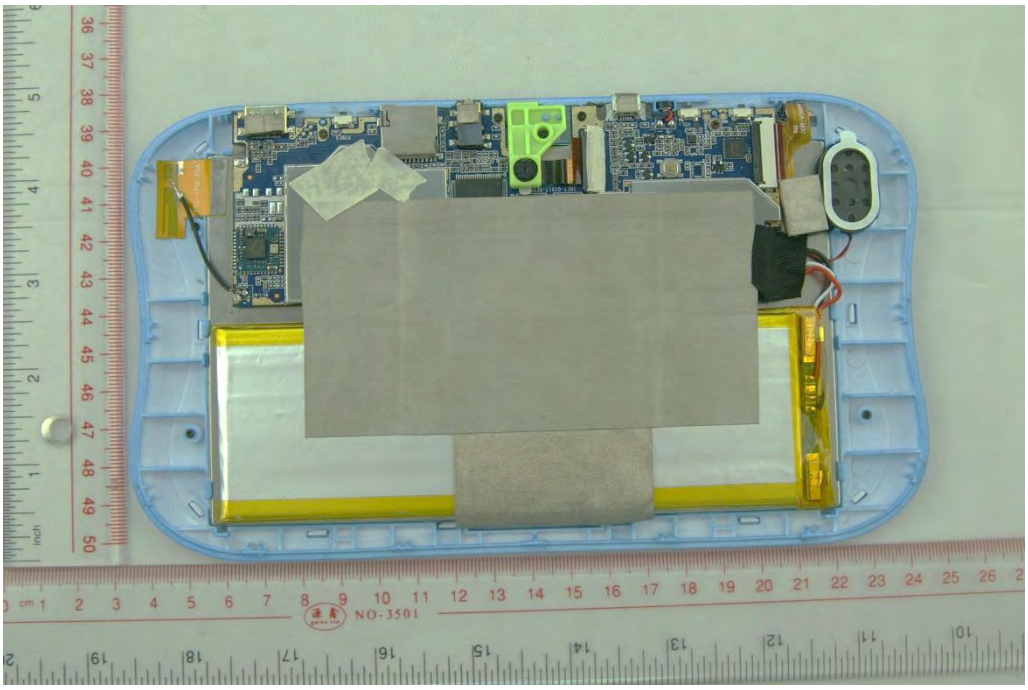


THE STEREO HEADSET OF EUT

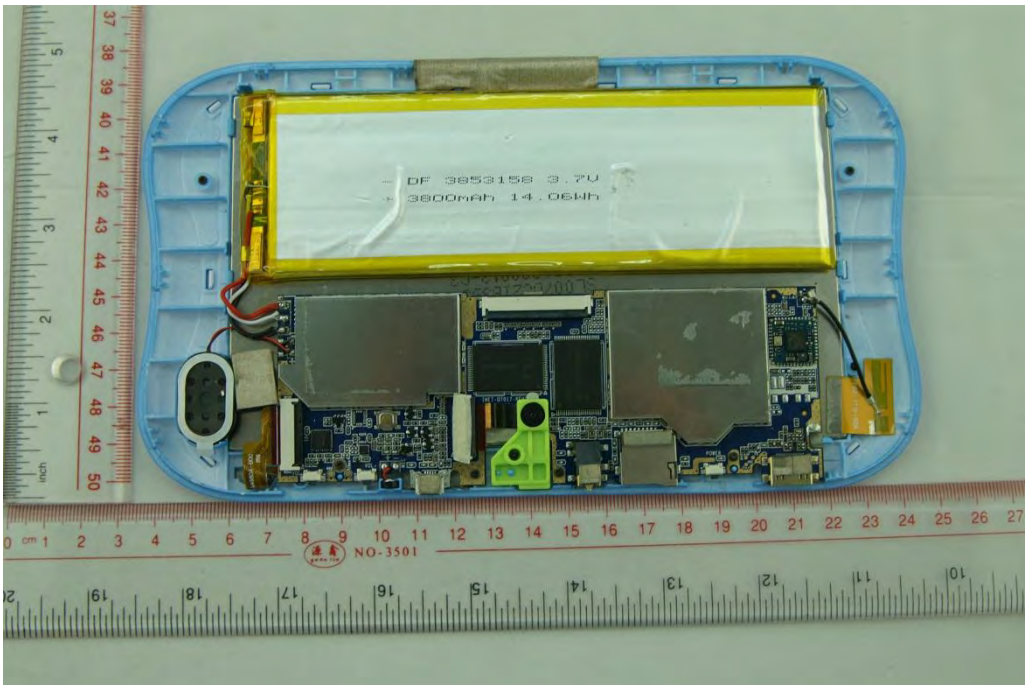
C.2 Inside of the EUT



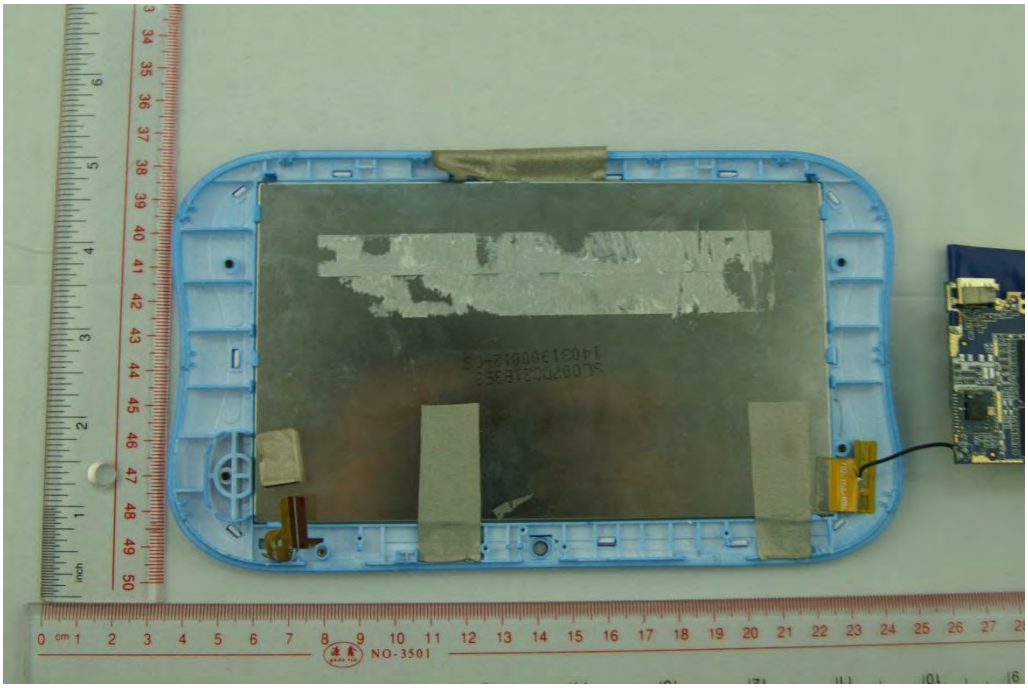
REAR COVER



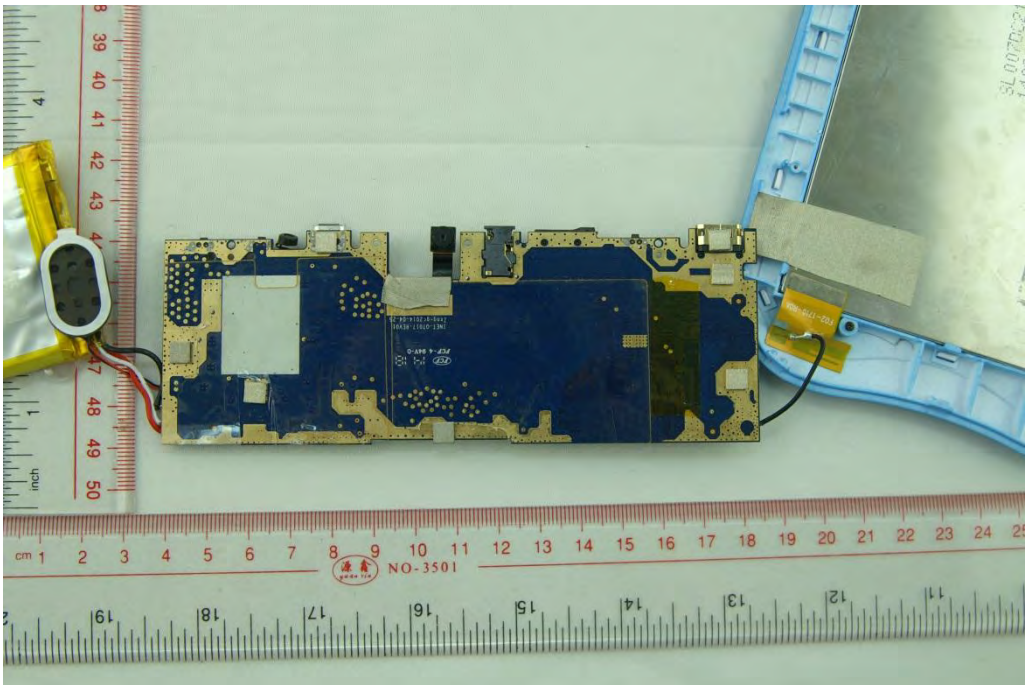
EUT UNCOVER VIEW 1



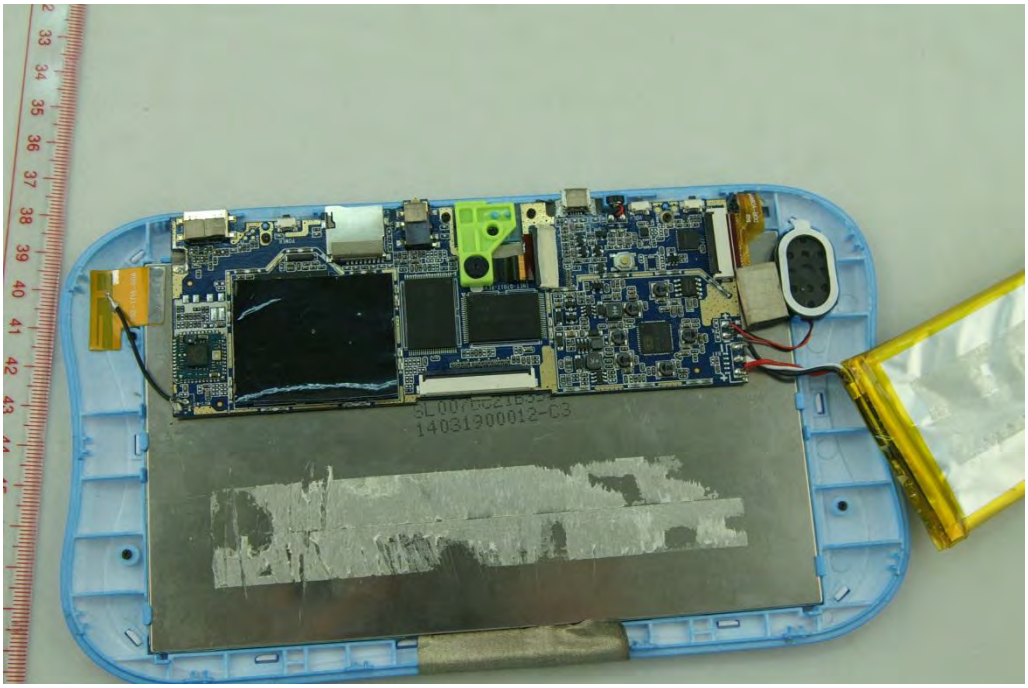
EUT UNCOVER VIEW 2



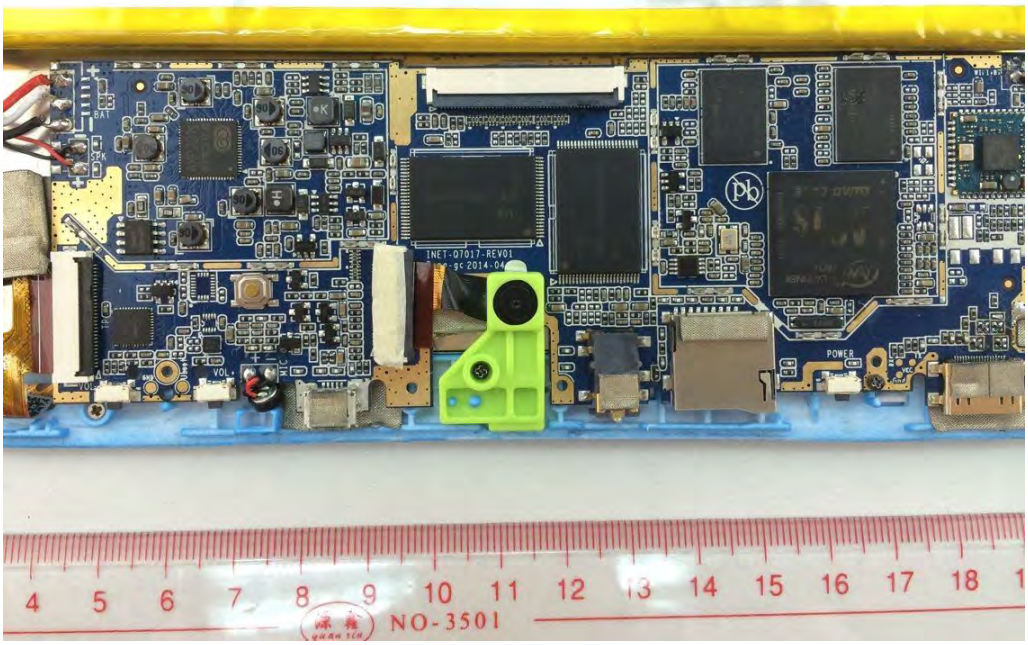
EUT UNCOVER VIEW 3



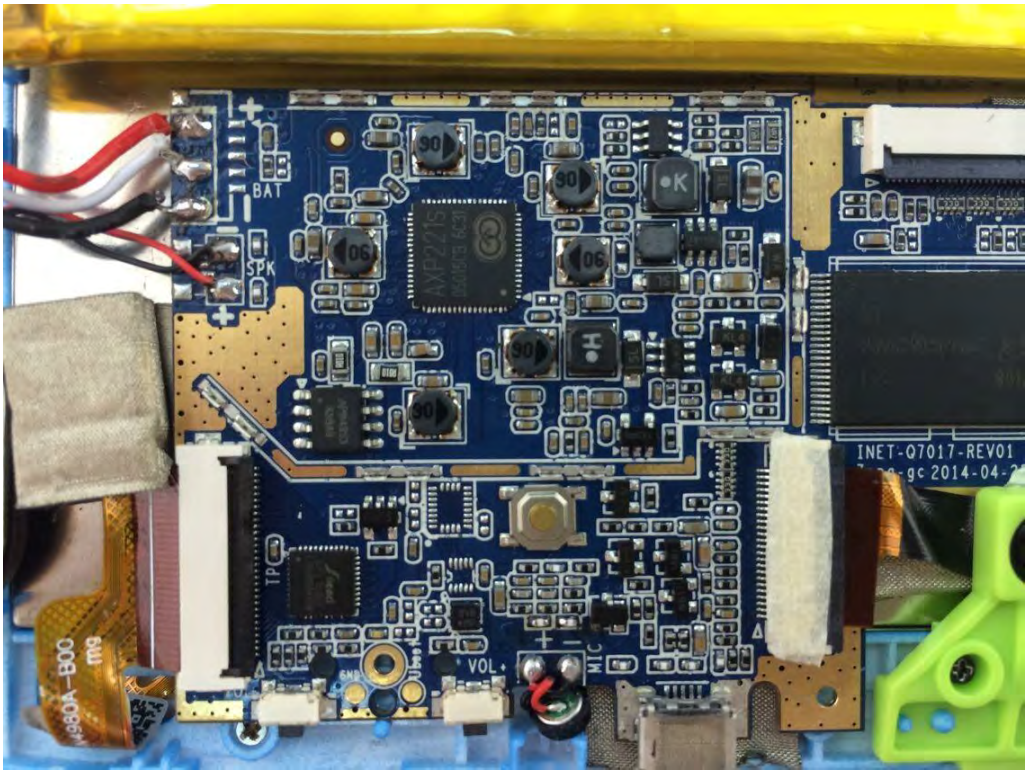
MAIN BOARD TOP VIEW 1



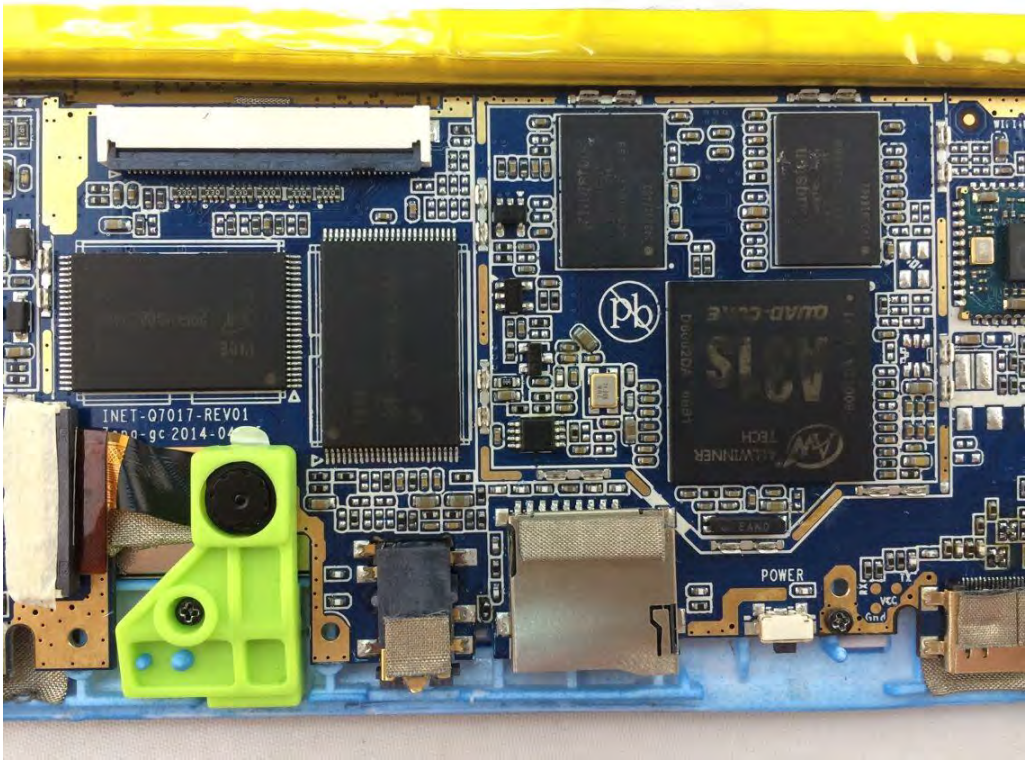
MAIN BOARD TOP VIEW 2



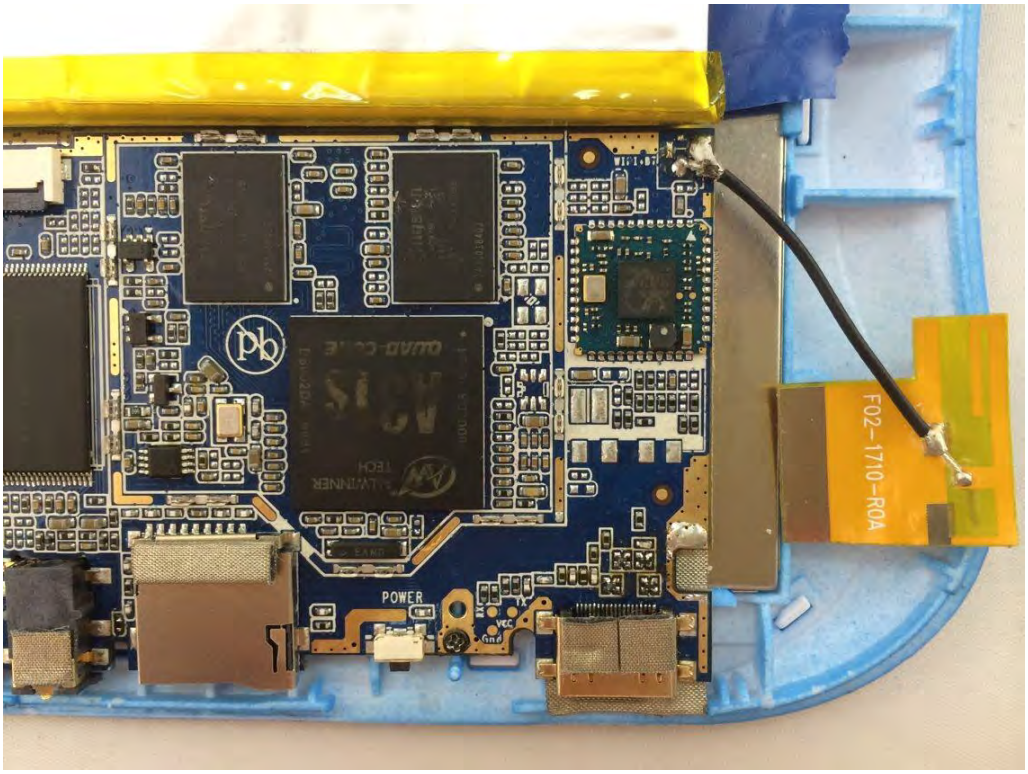
MAIN BOARD TOP VIEW 3



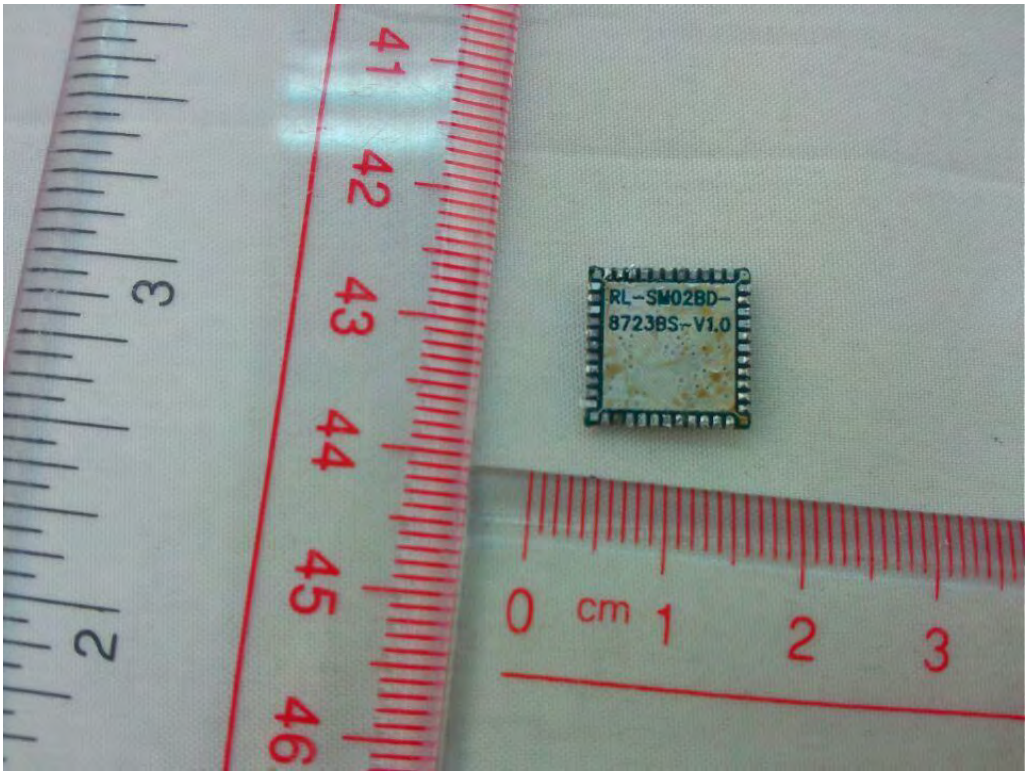
MAIN BOARD CLOSE-UP 1



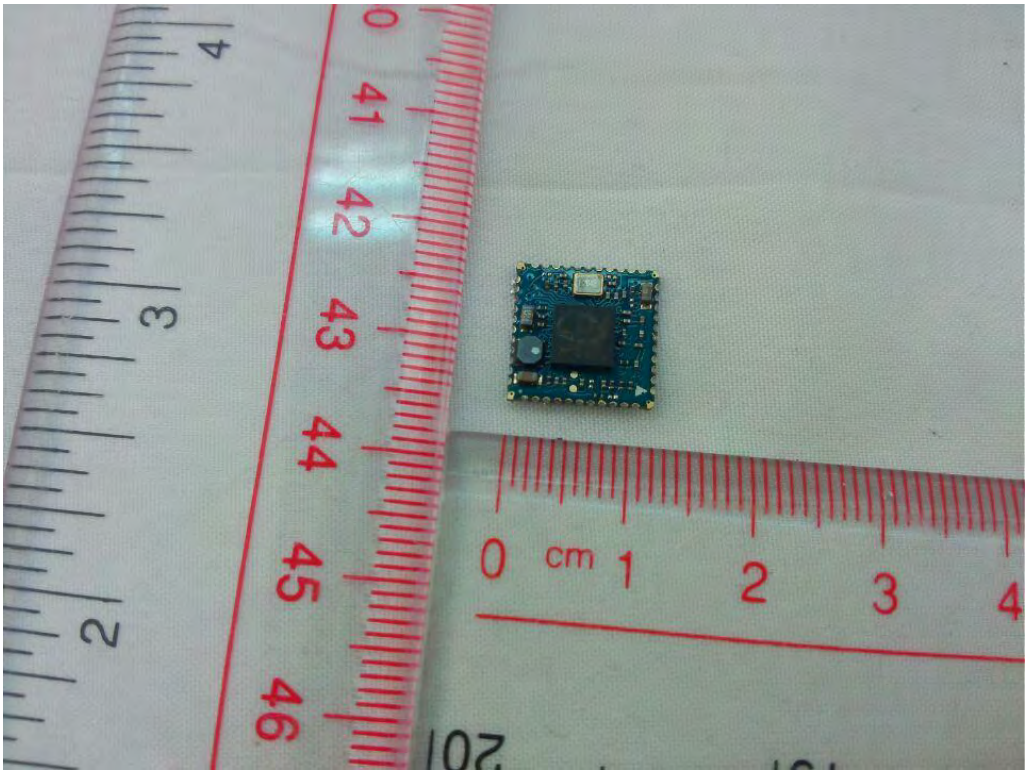
MAIN BOARD CLOSE-UP 2



MAIN BOARD CLOSE-UP 3



RF BOARD 1



RF BOARD 2

--END OF REPORT--